SANYO

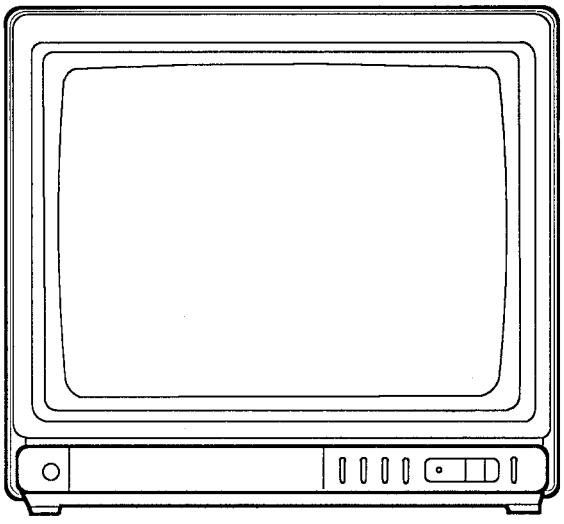
FILE NO. C-1033

SERVICE MANUAL

Remote Control Color Television

AVM-1303 (U.S.A.)

ORIGINAL VERSION



Chassis No. A8Y-13030

NOTE: Match the Chassis No. on the unit's back cover with the Chassis No. in the Service Manual.

If the Original Version Service Manual Chassis No. does not match the unit's, additional Service Literature is required. You **must** refer to "Notices" to the Original Service Manual prior to servicing the unit.

Contents

Specifications

Power Rating ····· 120V 60Hz
Antenna Input Impedance ····· 75 Ohm UHF/VHF/CATV
Receiving channel ····· 2-13(VHF), 14-69(UHF), 01,14-94, 95-125(CATV)
Remote Ready ····· 22 Key Remote Control
Sound output ····· 1.0W
Intermediate frequency
- Picture IF carrier ····· 45.75MHz
- Sound carrier ····· 41.25MHz
- Color sub carrier ····· 42.17MHz
- Picture tube ····· A34JRY24X

Semiconductors
- Integrated Circuits ····· 8
- Transistors ····· 22

Except within Tuner
Cabinet dimensions
- Width ····· 362
- Height ····· 325
- Depth ····· 372

A8YWM,PRODUCT CODE 111247597

REFERENCE No. SM510029

SAFETY INSTRUCTIONS

SAFETY PRECAUTIONS

WARNING: The chassis of this receiver has a floating ground with the potential of one half of the AC line voltage in respect to earth ground. Service should not be attempted by anyone not familiar with the precautions necessary when working on this type of equipment. The following precautions must be observed:

1. An isolation transformer should be connected in the power line between the receiver and the AC line before any service is performed on the receiver.

2. Comply with all caution and safety-related notes provided on the cabinet back, inside the cabinet, on the chassis or the picture tube.

3. When replacing a chassis in the cabinet, always be certain that all the protective devices are installed properly, such as control knobs, adjustment covers or shields and barriers.
   DO NOT OPERATE THIS TELEVISION RECEIVER WITHOUT THE PROTECTIVE SHIELD IN POSITION AND PROPERLY SECURED.

4. Before replacing the back cover of the set, thoroughly inspect the inside of the cabinet to see that no stray parts or tools have been left inside.
   Before returning any television to the customer, the service technician must perform the following safety checks and be sure that it is completely safe to operate without danger of electrical shock.

ANTENNA COLD CHECK

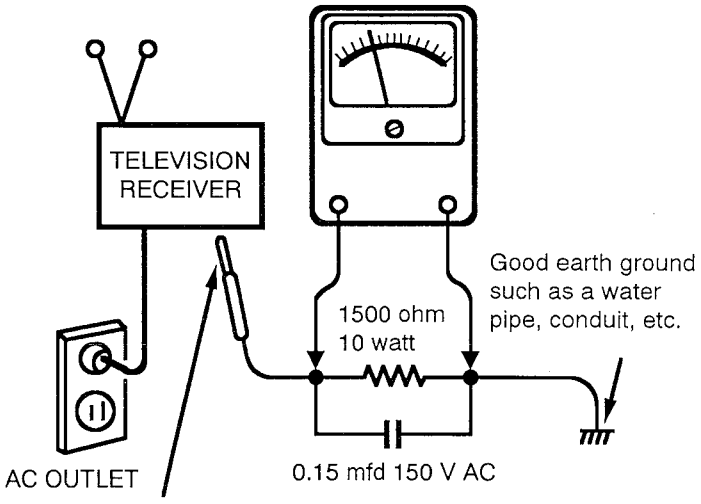
With the AC plug removed from the 120 VAC outlet, place a jumper across the two blades. Connect one lead of an ohmmeter, to the jumpered AC plug and touch the other lead to each exposed antenna terminal (UHF and VHF antenna terminals).The resistance must measure between 1M ohm and 5.2M ohm. Any resistance value below or above this range indicates an abnormality which requires corrective action.

LEAKAGE CURRENT CHECK

Plug the AC line cord directly into a 120 VAC outlet (do not use an isolation transformer for this check). Use an AC voltmeter, having 5000 ohms per volt or more sensitivity. Connect a 1500 ohm 10 watt resistor, paralleled by a 0.15mfd 150 VAC capacitor between a known good earth ground (waterpipe, conduit, etc.) and all exposed metal parts of the cabinet (antennas, handle bracket, metal cabinet, screwheads, metal overlays, control shafts, etc.). Measure the AC voltage across the 1500 ohm resistor.
The AC voltage indicated by the meter may not exceed 0.75V. A reading exceeding 0.75V indicates that a dangerous potential exists. The fault must be located and corrected. Repeat the above test with the receiver power plug reversed.

NEVER RETURN A RECEIVER TO THE CUSTOMER WITHOUT TAKING THE NECESSARY CORRECTIVE ACTION.

READING SHOULD NOT EXCEED 0.75V
AC VOLT METER
(5000 ohm per volt or more sensitivity)



To be touched to all of the exposed metal parts.

Voltmeter Hook-up for Leakage Current Check

X-RADIATION PRECAUTION

The primary source of X-RADIATION in a solid-state television receiver is the picture tube. The picture tube is specially constructed to limit X-RAY emissions. For continued X-RADIATION protection, the replacement tube must be the same type as the original including suffix letter. Excessive high voltage may produce potentially hazardous X-RADIATING. To avoid such hazards, the high voltage must be maintained within specified limits. Refer to the X-RADIATION WARNING NOTE on the CHASSIS SCHEMATIC in this service manual for specific high voltage limits. If the high voltage exceeds specified limits, check the components specified on the chassis schematic diagram and take the necessary corrective action. Carefully follow the instructions for +B Voltage Check and High Voltage Check to maintain the high voltage within the specified limits.

HIGH VOLTAGE HOLD-DOWN TEST

To prevent X-RADIATION from the picture tube due to excessive high voltage, a HOLD-DOWN circuit is provided in the high voltage circuit. Every time the receiver is serviced, the high voltage HOLD-DOWN circuit must be tested for proper operation. Refer to the HIGH VOLTAGE HOLD-DOWN TEST in the service adjustment.

PRODUCT SAFETY NOTICE

Product safety should be considered when a component replacement is made in any area of a receiver, Components indicated by a star (★) in the parts list and the schematic diagram designate components in which safety can be of special significance. It is, therefore, particularly recommended that the replacement of these parts must be made by exactly the same PARTS.

SERVICE ADJUSTMENT

ANTENNA CONNECTIONS

This receiver is designed for UHF/VHF reception. A 75 ohm terminal is provided for UHF and VHF receptions.
When connecting the CATV antenna system, connect 75 ohm coaxial cable directly to 75 ohm terminal. For 300 ohm VHF antenna, use the Adapter included in the TV set.

CIRCUIT PROTECTION

A fuse (4A) is included in the AC line. Fuse must be replaced with proper fuse (See Parts List).

+B VOLTAGE CHECK

Connect Voltmeter + lead to "TJ1 135V " and negative lead to ground (TE7). Connect receiver to AC 120V line. Tune receiver to an active channel. Set contrast and brightness controls for maximum.
Voltage must measure between +133.0V to +137.0V, if the voltage is out of this range, power circuit must be checked and replaced if necessary. No +B adjustment is provided on this chassis.

RF AGC ADJUSTMENT

1. Tune receiver to strongest VHF station in your area.
2. Set brightness and contrast controls for maximum.
3. Turn RF AGC control (VR101) in the direction which causes snow to appear, then in the opposite direction until the snow just disappears.

VERTICAL SIZE ADJUSTMENT

Tune receiver to an active channel. Adjust Vert. Size control (VR451) for lull scan.

VERTICAL CENTERING ADJUSTMENT

Tune receiver to an active channel. Check that picture is in the center of TV screen. If picture center is too low, connect resistor R460 (1K ohm, 1/2W). If picture center is too high, connect resistor R461 (2.2K ohm, 1/4W).

FOCUS ADJUSTMENT

Adjust focus control(T402) for well defined scanning lines.

GRAY SCALE ADJUSTMENT

1. Set red (VR704) and blue (VR705), drive controls to mid position. Set blue (VR703), green (VR702) and red (VR701) bias controls to minimum (fully counterclockwise).
2. Set screen control to minimum (fully counter- clockwise).
3. Set service tip to "SERVICE" position on pix tube board.
4. Advance screen control clockwise to obtain just visible one color line. If line will not appear, place this control to maximum (fully clockwise).
5. Advance each bias control to obtain just visible white line.
6. Set service Tip to "NORMAL" position.
7. Adjust red and blue drive controls alternately to produce normal black and white picture in highlight areas.
8. Check for proper gray scale at all brightness levels.

NOTE; If gray scale adjustment is made after picture tube replacement, check brightness level adjustment.

BRIGHTNESS LEVEL ADJUSTMENT

NOTE; High Voltage, AGC and Grayscale must be adjusted before attempting Brightness Level adjustment.

1. Connect color bar generator to antenna terminals.
2. Tune receiver to a crosshatch signal.
3. Set Brightness to maximum and Color Control for minimum.
4. Set contrast to maximum.
5. Set sharpness to maximum.
6. Set "AUTO : OFF" mode.
7. Connect Voltmeter "+" lead to TP51 and "-" lead to TP50.
8. Adjust Brightness Level Control (VR301) for 0.03 VDC. Check brightness level in every active channels, readjust if necessary.

NOTE; Do not set to excessive brightness levels, otherwise the contrast level is suppressed.

HIGH VOLTAGE CHECK

NOTE; +B (+135V) power supply must be checked,and Gray Scale adjusted before attempting High Voltage check.

1. Connect high voltage voltmeter + lead to anode of picture tube, connect negative lead to ground.
2. Tune receiver to an active channel and confirm TV is operating properly.
3. Eliminate the beam current, short terminals TP27 and TP34 with 1K ohms resister.
4. Confirm high voltage is within 20.0KV to 22.0KV. If reading is not within range, check horizontal circuit. No high voltage adjustment is provided on this chassis.

HIGH VOLTAGE HOLD-DOWN TEST

Every time the receiver is serviced, the HIGH VOLTAGE HOLD-DOWN circuit must be tested for proper operation. Testing should be made in the following steps.

1. Connect receiver to AC 120V line. Tune receiver to an active channel. Set "AUTO : ON" mode.
2. Check that the voltage measured between TP7 and TE7(ground side) is within 14V and 21V.
   If the voltage is out of this range,the hold-down circuit must be checked.
3. Connect DC supply to TP7 and TE7(ground side).
   Set DC voltage to 23V.
   The receiver should shutdown and it loses raster and sound.
   Then the receiver is turned off automatically.
   This is the evidence that the hold-down circuit is functioning properly.
4. To obtain picture again, temporarily turn the receiver off and then back on.

AFT CENTERING ADJUSTMENT

1. Disconnect the AC power cord. (AC 120V line)
2. Connect voltmeter + lead to "TP113" on main board and - lead to main board ground. Ground "TP113" with short jumper lead.
3. Connect the AC power cord again, pressing the "POWER" key of the receiver. (The receiver turn on.)
4. Tune TV set to a good conditions active color channel, use keys 0~9.
   Wait few seconds until properly tuned then remove short lead from terminal "TP113".
5. Turn AFT centering coil (T102) on Main board to fully clockwise, then gradually turn the coil counterclockwise until voltage indicates maximum (approximately 3.8 volt).Continue to turn the coil same direction until voltage indicates minimum (approximately 1.2 volt), then turn the coil opposite direction until voltage indicates 2.5 volt. Voltage change in the coil adjustment is shown in figure1.
6. Remove voltmeter from chassis.
   Selects every active channels with keys 0 - 9 and scanning keys, and check AFT is operating properly.

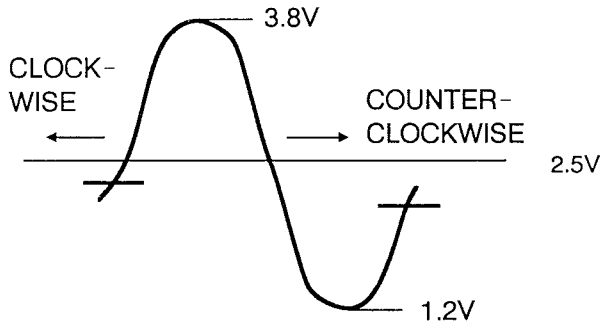


Figure 1 Voltage Change in Coil Adjustment

SELF DEMO NOTICE

PLEASE READ THE FOLLOWING INFORMATION FOR OPERATION OF THE DEMO FEATURE.

- To begin the self DEMO feature, press and hold menu key for 5 seconds while the digital display is not on the screen. The TV's features will be displayed on the screen. The on-screen display will continue to repeat.
- To CANCEL the demo on-screen feature, press and hold menu key for 5 seconds.

REMOTE CONTROL TRANSMITTER SERVICE NOTE

To repair remote control transmitter, check as follows:

1. Check battery installation and battery voltage.
   If necessary, replace batteries.
2. Connect oscilloscope to Q01 "Base" and ground.
3. Check the amplitude pulse by pushing the remote control transmitter key in the due order.
4. If pulse does not appear, replace with a new unit.

SOUND ADJUSTMENT

1. Tune receiver to an active channel and fine tune to obtain the best picture.
2. Set volume control to middle level.
3. Adjust Sound DET. Trans. (T151) for the best sound and minimum noise.

P.I.F. ALIGNMENT INSTRUCTIONS

GENERAL: Shielding around the P.I.F. circuit must be in place. To prevent possible damage to the TV circuit, TV set should be OFF when connecting the alignment equipment to the circuit.

P.I.F. ALIGNMENT

Connect the test equipment and set up the TV set as follows;

BIAS SUPPLY

Apply IF AGC +6.0V to TP12, and +13.8V DC supply to TP2.

SCOPE

Connect scope VERT INPUT to SCOPE VERT on SWEEP/MARKER GENERATOR.
Connect scope EXTERNAL HORIZ IN to scope HORIZ on SWEEP/MARKER GENERATOR.

SWEEP/MARKER GENERATOR

Connect SWEEP OUTPUT to TP132 through the matching pad as shown. Connect INPUT PROBE to TP16 as shown in Figure 1.

TELEVISION

Ground TP11 with jumper lead.
Turn the TV set on and tune to an unused channel.

Align P.I.F. as follows :

STEP AND MARKERS
P.I.F. detect stage adjustment. 41.25MHz, 45.75MHz, and 47.25MHz markers ON.
ALIGNMENT PROCEDURES
Response characteristic should be similar to Figure 2. Adjust P.I.F. detect Trans. (T101) so that the maximum attenuation point of the P.I.F. detection spectrum is at 45.75MHz as shown in Figure 2.

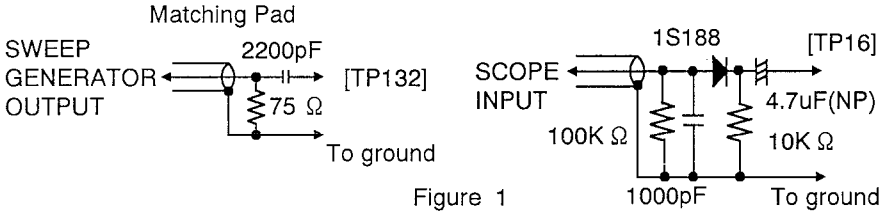


Figure 1

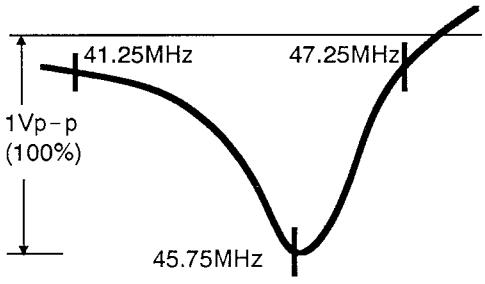


Figure 2 P.I.F. Detection Stage

PURITY AND CONVERGENCE ADJUSTMENT

CAUTION: The Convergence and Purity adjustments have been made at the factory. Readjustment should be made only after picture tube or deflection yoke replacement, following the steps below:

PURITY ADJUSTMENT

1. Demagnetize the picture tube and receiver using an external degaussing coil. Loosen the screw holding the Deflection Yoke and remove the 3 Rubber Wedges.
2. Rotate and spread the Tabs of the 2 Purity Magnets to center the vertical green belt in the picture screen. The Purity Magnets are also adjusted to obtain vertical centering of the raster.
3. Slowly slide the Deflection Yoke backward until a uniform green screen is obtained.
4. Check the purity of the red and blue screens for uniformity. If part of the picture screen is colored, adjust the Deflection Yoke position forward or backward slightly.
5. Tighten the mounting screw of the Deflection Yoke. Adjust Convergence next.

CONVERGENCE ADJUSTMENT

1. Use a dot crosshatch pattern signal.
2. Adjust the angle between the Tabs of the 4 Pole Magnet 1and 2, and superimpose the Red and Blue vertical lines in the center area of the picture screen. Refer to figure 5.
3. Keeping the mutual angle of the Tabs of the 4 Pole Magnet turn them together to superimpose the Blue and Red horizontal lines in the center area of the picture screen. Refer to figure 5.
4. Adjust the 6 Pole Magnet 3 and 4 so that the Green line superimposed on the Red/Blue lines.
   This is the same procedure used in steps 2 and 3. Refer to figure 6.

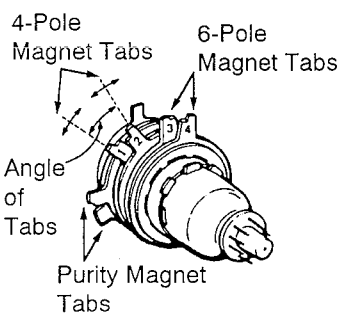


Figure 3 MAGNET TABS

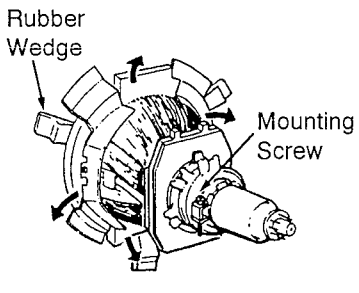


Figure 4 DEFLECTION YOKE

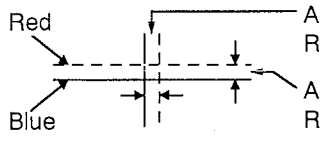


Figure 5 RED AND BLUE LINE MOVEMENT

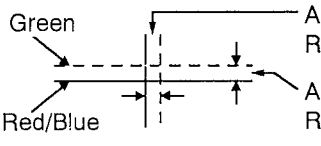


Figure 6 RED/BLUE AND GREEN LINE MOVEMENT

SERVICE HINTS

POWER FAILURE DETECTOR

This set is equipped with "Power Failure detector" installed on the CPU which checks abnormal failure for several of the power supply circuits and some including power supply from the Horiz. Output Trans.

If unexpected failure is caused by any of the following which then results in lower voltage supply, the set will turn off by itself in 1 second to prevent any damages:

- Failure within the power supply circuit.
- Unexpected short circuit by load side from the supply.
- Stoppage of Horiz. Output oscillation caused by the Hold Down Circuit for X-Radiation protection.

The power will shut off itself within 2.5 seconds as long as any of these failures remain uncorrected.

Check the following if the set is turned off caused by the power failure detector.

1. Connect DC Voltmeter to the following TEST POINT and check proper voltage supply.

TJ5 9V

2. If at least one of the voltage is lower, the power failure detector circuit should work to turn the set off.

MECHANICAL DISASSEMBLIES

CABINET BACK REMOVAL

1. Refer to Figure 1, remove 5 screws.
2. Pull cabinet back off and remove cabinet back.

CHASSIS REMOVAL

1. Remove Cabinet Back, refer to "Cabinet Back Removal".
2. Disconnect Degaussing coil socket (KD), Picture tube socket, Deflection yoke connector (KX), Speakers connector (KSP), anode lead, picture tube ground lead and chassis ground lead.
3. Pull out chassis from cabinet, and remove chassis completely.

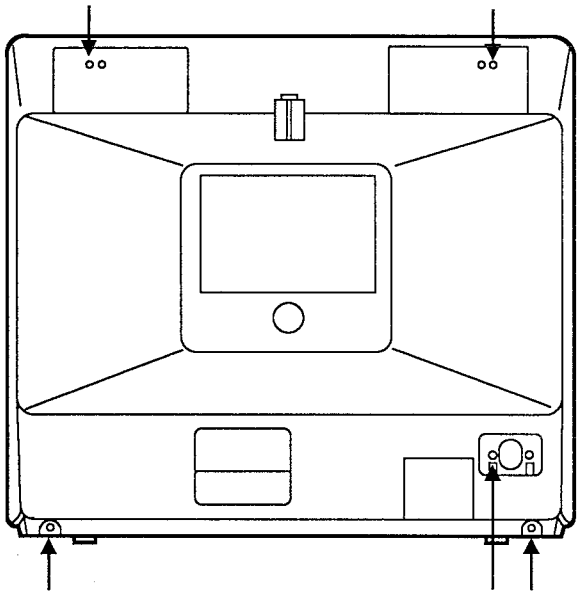


Figure 1. Cabinet Back Removal

PICTURE TUBE REMOVAL

CAUTION: Do not disturb the deflection yoke or magnet assembly on the picture-tube neck. Care must be taken to keep these assemblies intact, unless picture tube is being replaced.
Discharge the picture tube's coating before handling the tube.

1. Remove chassis, referring to "Chassis Removal" instructions.
2. Place cabinet's front face down on a soft surface.
3. Remove the screw on each corner of the picture tube and GENTLY remove the picture tube from the cabinet.
4. Install a replacement picture tube in reverse order. Referring to Figure 2, properly install the degaussing coil and picture-tube grounding lead on the picture tube.

NOTE: If Picture Tube is being replaced, mount the Degaussing Coil properly on the tube. See illustration.

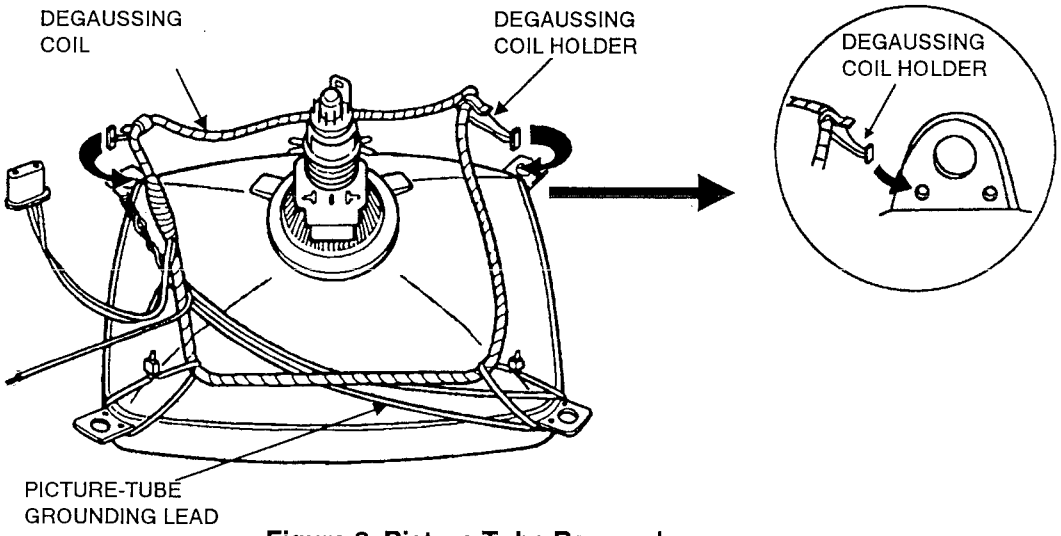


Figure 2. Picture Tube Removal

REMOTE CONTROL TRANSMITTER DISASSEMBLY

1. See Figure-3. Press the battery cover downward and sliding it off the back of the transmitter.
2. Remove the screw.
3. Push and pull the rear of cabinet bottom, then push and pull the side of cabinet bottom, and remove the cabinet bottom. See Figure-4.

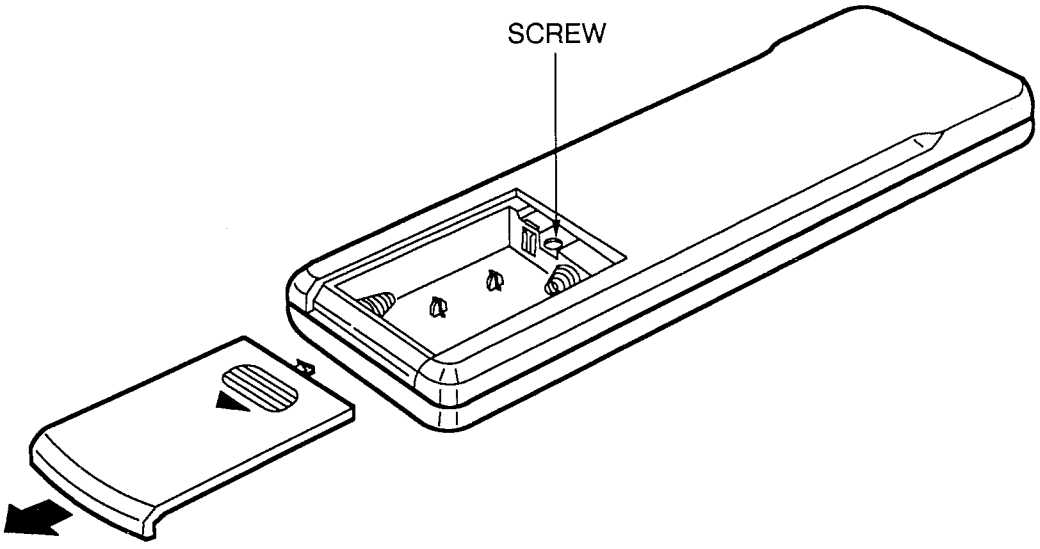


Figure-3.

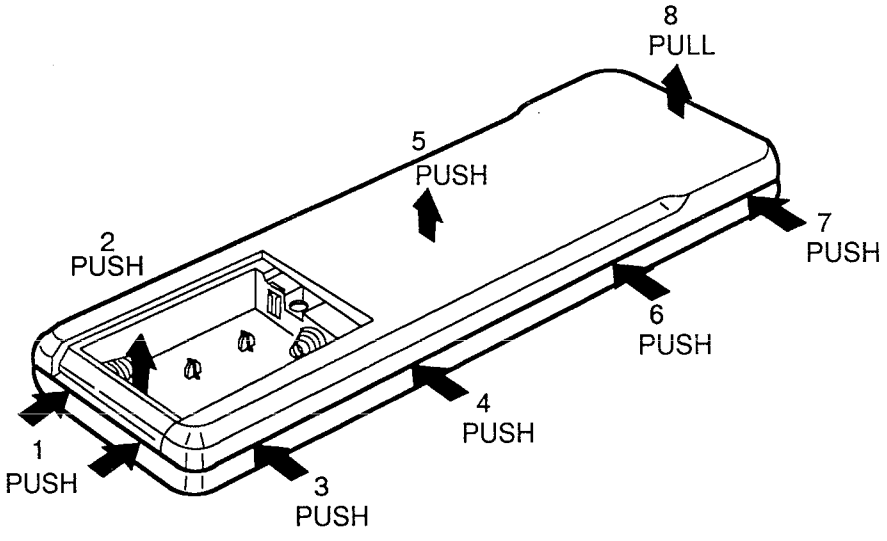


Figure-4.

Remote Control Transmitter Disassembly

CHASSIS ELECTRICAL PARTS LIST

CAUTION: To protect against electric shock and for continued product safety, refer to Safety Precautions, X-Radiation precautions and Product Safety Notice on Page 2.

PRODUCT SAFETY NOTICE

PRODUCT SAFETY SHOULD BE CONSIDERED WHEN A COMPONENT REPLACEMENT IS MADE IN ANY AREA OF A RECEIVER. COMPONENTS INDICATED BY A STAR(★) IN THIS PARTS LIST AND THE SCHEMATIC DIAGRAM DESIGNATE COMPONENTS IN WHICH SAFETY CAN BE OF SPECIAL SIGNIFICANCE. IT IS PARTICULARLY RECOMMENDED THAT ONLY PARTS DESIGNATED ON THE FOLLOWING PARTS LIST BE USED FOR COMPONENT REPLACEMENT DESIGNATED BY A STAR. NO DEVIATIONS FROM RESISTANCE, WATTAGE AND VOLTAGE RATINGS MAY BE MADE FOR REPLACEMENT ITEMS DESIGNATED BY A STAR.

NOTE ; Parts having Location Number are located in the following boards.

- **Numbers under 600 Series ..... In the Main Board.**
- **Numbers 700 Series ..... In the Picture Tube Socket Board.**
- **Numbers 800 Series ..... In the Main Board.**
- **Numbers 900 Series ..... In the Antenna Terminal Board and Out of Board.**
- **Numbers 1000 Series ..... In the Main Board.**
- **Numbers 1500 Series ..... In the Main Board.**

CAPACITORS

NOTES:

Read description in the Capacitor as follows:

(Example)

CERAMIC 100P K 50V

- 50V — Rated Voltage
- K — Tolerance Symbols:

less than 10PF

A...Not specified
B... ± 0.1PF
C... ± 0.25PF
D... ± 0.5PF
F... ± 1PF
G... ± 2PF
R...+0.25 − 0PF
S...+0 − 0.25PF
E...+0 − 1PF

more than 10PF

A...Not specified
B... ± 0.1%
C... ± 0.25%
D... ± 0.5%
F... ± 1%
G... ± 2%
H... ± 3%
J... ± 5%
K... ± 10%
L... ± 15%
M... ± 20%
N... ± 30%
P...+100 − 0%
Q...+30 − 10%
T...+50 − 10%
U...+75 − 10%
V...+20 − 10%
W...+100 − 10%
X...+40 − 20%
Y...+150 − 10%
Z...+80 − 20%

- 100P — Rated Value: P...Pico Farad U...Micro Farad
- CERAMIC — Material:

CERAMIC ..... Ceramic
MT-PAPER ..... Metallized Paper
POLYESTER ..... Polyester
MT-POLYEST ..... Metallized Polyester
POLYPRO ..... Polypropylene
MT-POLYPRO ..... Metallized Polypropylene
COMPO-FILM ..... Composite Film
MT-COMPO ..... Metallized Composite
STYRENE ..... Styrene
TA-SOLID ..... Tantalum Solid
AL-SOLID ..... Aluminium Solid
ELECT ..... Electrolytic
OS-SOLID ..... Aluminium Solid with Organic Semiconductive Electrolytic
DL-ELECT ..... Double Layered Electrolytic

Schematic Location	Part No.	Description
★C001	404 007 8708	MT-COMPO 0.1U M 125V
	404 047 3503	MT-POLYEST 0.1U M 125V
★C002	403 075 7101	CERAMIC 1000P K 500V
★C003	403 075 7101	CERAMIC 1000P K 500V
★C006	404 004 9401	ELECT 330U Q 180V
	404 038 5301	ELECT 330U Q 180V
	404 049 4706	ELECT 330U M 200V
★C007	403 103 0005	ELECT 4.7U M 160V
★C021	403 075 7101	CERAMIC 1000P K 500V
C022	403 047 5005	ELECT 470U M 25V
C023	403 038 6301	ELECT 220U M 6.3V
C031	403 057 2803	POLYESTER 0.1U K 50V
	403 057 3701	POLYESTER 0.1U K 50V
C101	403 069 8305	CERAMIC 0.01U Z 50V
C102	403 069 8305	CERAMIC 0.01U Z 50V
C104	403 067 6709	MT-COMPO 0.22U J 50V
	403 166 8109	MT-POLYEST 0.22U J 63V
C106	403 049 9803	ELECT 2.2U M 50V
C107	403 069 0507	CERAMIC 1000P K 50V
C108	403 028 2009	CERAMIC 56P J 50V
C109	403 069 8305	CERAMIC 0.01U Z 50V
C110	403 060 8205	POLYESTER 0.033U K 50V
	403 060 8809	POLYESTER 0.033U K 50V
C113	403 048 6308	ELECT 0.47U M 50V
C114	403 069 8305	CERAMIC 0.01U Z 50V
C116	403 041 8804	ELECT 10U M 16V
C151	403 069 8305	CERAMIC 0.01U Z 50V
C152	403 063 5706	POLYESTER 8200P K 50V
	403 063 6307	POLYESTER 8200P K 50V
C153	403 068 9006	CERAMIC 100P K 50V
C302	403 069 8305	CERAMIC 0.01U Z 50V
C303	403 009 3100	CERAMIC 100P J 50V
C304	403 028 1705	CERAMIC 56P J 50V
C307	403 049 0008	ELECT 1U M 50V
C308	403 049 0008	ELECT 1U M 50V
C309	403 014 0309	CERAMIC 18P J 50V
C312	403 049 0008	ELECT 1U M 50V
C313	403 048 6308	ELECT 0.47U M 50V
C316	403 041 8804	ELECT 10U M 16V
C321	403 058 3205	POLYESTER 0.015U K 50V

Schematic Location	Part No.	Description
	403 058 3809	POLYESTER 0.015U K 50V
C322	403 049 9803	ELECT 2.2U M 50V
C324	403 073 6403	CERAMIC 470P K 50V
C329	403 022 6003	CERAMIC 33P J 50V
C341	403 044 1703	ELECT 470U M 16V
C342	403 039 6508	ELECT 100U M 10V
C398	403 039 6508	ELECT 100U M 10V
C399	403 039 6508	ELECT 100U M 10V
C401	403 042 7707	ELECT 22U M 16V
C402	403 074 8901	CERAMIC 680P K 50V
C403	403 048 6308	ELECT 0.47U M 50V
C404	403 049 9803	ELECT 2.2U M 50V
C406	403 060 8205	POLYESTER 0.033U K 50V
	403 060 8809	POLYESTER 0.033U K 50V
★C407	403 075 7101	CERAMIC 1000P K 500V
★C409	403 075 9006	CERAMIC 150P K 500V
C414	403 038 9708	ELECT 330U M 6.3V
C420	403 073 6403	CERAMIC 470P K 50V
C421	403 048 6308	ELECT 0.47U M 50V
★C428	403 103 0005	ELECT 4.7U M 160V
★C432	404 057 9908	MT-POLYPRO 4300P H 1.5K
★C433	403 078 6606	CERAMIC 680P K 3K
	403 078 6705	CERAMIC 680P K 3K
	403 165 6700	CERAMIC 680P K 3K
	403 185 9408	CERAMIC 680P K 3K
★C434	403 076 4000	CERAMIC 4700P K 500V
★C436	403 082 9006	POLYPRO 0.27U J 200V
C451	403 045 7803	ELECT 220U M 25V
C452	403 204 6104	ELECT 1U M 50V
C453	403 051 0607	ELECT 4.7U M 50V
C456	403 052 7308	ELECT 100U M 35V
C457	403 054 0703	ELECT 47U M 35V
C458	403 042 4805	ELECT 1000U M 16V
C459	403 063 7601	POLYESTER 0.082U K 50V
	403 063 8202	POLYESTER 0.082U K 50V
	403 166 7300	MT-POLYEST 0.082U J 63V
C461	403 057 0403	POLYESTER 0.01U K 50V
	403 057 1004	POLYESTER 0.01U K 50V
C464	403 072 4400	CERAMIC 270P K 50V
C467	403 072 4400	CERAMIC 270P K 50V
★C474	404 001 3709	ELECT 47U T 160V
C476	403 052 7308	ELECT 100U M 35V
★C477	404 056 5109	ELECT 2.2U M 100V
C483	403 051 0607	ELECT 4.7U M 50V
C484	403 044 1703	ELECT 470U M 16V
C501	403 043 0202	ELECT 220U M 16V
C502	403 038 8602	ELECT 33U M 6.3V
C503	403 069 8305	CERAMIC 0.01U Z 50V
C511	403 041 8804	ELECT 10U M 16V
C531	403 041 8804	ELECT 10U M 16V
C532	403 017 7503	CERAMIC 22P J 50V
C533	403 017 7503	CERAMIC 22P J 50V
C534	403 049 0008	ELECT 1U M 50V
C541	403 060 2302	POLYESTER 0.027U K 50V
	403 060 2906	POLYESTER 0.027U K 50V
C542	403 075 4209	CERAMIC 820P K 50V
C543	403 060 2302	POLYESTER 0.027U K 50V
	403 060 2906	POLYESTER 0.027U K 50V
C551	403 041 8804	ELECT 10U M 16V
C552	403 041 8804	ELECT 10U M 16V
C553	403 041 8804	ELECT 10U M 16V
C554	403 041 8804	ELECT 10U M 16V
C572	403 048 6308	ELECT 0.47U M 50V
C581	403 030 5104	CERAMIC 68P J 50V
C595	403 030 5104	CERAMIC 68P J 50V
C596	403 030 5104	CERAMIC 68P J 50V
C597	403 030 5104	CERAMIC 68P J 50V
C601	403 049 0008	ELECT 1U M 50V

Schematic Location	Part No.	Description
★C602	403 103 0005	ELECT 4.7U M 160V
★C603	403 076 2907	CERAMIC 390P K 500V
★C604	403 157 8705	ELECT 0.47U M 160V
C606	403 048 6308	ELECT 0.47U M 50V
★C607	403 075 7101	CERAMIC 1000P K 500V
★C608	403 075 7101	CERAMIC 1000P K 500V
C701	403 071 7402	CERAMIC 2200P K 50V
C703	403 074 8901	CERAMIC 680P K 50V
C705	403 074 8901	CERAMIC 680P K 50V
C707	403 074 8901	CERAMIC 680P K 50V
★C708	403 077 2708	CERAMIC 1000P P 2K
	403 175 3409	CERAMIC 1000P P 2K
C1501	403 049 0008	ELECT 1U M 50V
C1502	403 074 5702	CERAMIC 560P K 50V
C1503	403 047 8402	ELECT 0.1U M 50V
C1504	403 059 3600	POLYESTER 2200P K 50V
	403 059 4201	POLYESTER 2200P K 50V
	403 060 6102	POLYESTER 3300P K 50V
	403 060 6706	POLYESTER 3300P K 50V
C1506	403 063 7601	POLYESTER 0.082U K 50V
	403 063 8202	POLYESTER 0.082U K 50V
C1508	403 049 0008	ELECT 1U M 50V
C1509	403 038 8602	ELECT 33U M 6.3V
C1510	403 069 8305	CERAMIC 0.01U Z 50V

DIODES

★D002	407 005 7605	DIODE EM2B
	407 013 3200	DIODE 1S1887A
	408 008 8606	DIODE GP15G
★D003	407 005 7605	DIODE EM2B
	407 013 3200	DIODE 1S1887A
	408 008 8606	DIODE GP15G
★D004	407 005 7605	DIODE EM2B
	407 013 3200	DIODE 1S1887A
	408 008 8606	DIODE GP15G
★D005	407 005 7605	DIODE EM2B
	407 013 3200	DIODE 1S1887A
	408 008 8606	DIODE GP15G
★D021	407 005 8602	DIODE ERA15-02
	407 011 3004	DIODE S5277B
	407 088 6502	DIODE MPG06D
	408 009 9404	DIODE 1N4002ID
D022	407 005 4505	DIODE DS442X
	407 013 1206	DIODE 1S1555
	407 013 4207	DIODE 1S2076
	407 013 7109	DIODE 1S2473
	408 008 2406	DIODE 1N4148
D023	407 048 1103	ZENER DIODE EQA02-05D(5V)
	407 048 1202	ZENER DIODE EQA02-05E(5V)
	407 056 7906	ZENER DIODE RD5.1EB1(5.1V)
	407 056 8002	ZENER DIODE RD5.1EB2(5.1V)
D031	407 005 4505	DIODE DS442X
	407 013 1206	DIODE 1S1555
	407 013 4207	DIODE 1S2076
	407 013 7109	DIODE 1S2473
	408 008 2406	DIODE 1N4148
D303	407 005 4505	DIODE DS442X
	407 013 1206	DIODE 1S1555
	407 013 4207	DIODE 1S2076
	407 013 7109	DIODE 1S2473
	408 008 2406	DIODE 1N4148
D306	407 013 1008	DIODE 1S1553
	407 013 4306	DIODE 1S2076A
	407 013 6508	DIODE 1S2471
	408 008 2406	DIODE 1N4148
D341	407 048 5606	ZENER DIODE EQA02-10A(10V)

Schematic Location	Part No.	Description
D345	407 005 4505	DIODE DS442X
	407 013 1206	DIODE 1S1555
	407 013 4207	DIODE 1S2076
	407 013 7109	DIODE 1S2473
	408 008 2406	DIODE 1N4148
★D411	407 158 1307	ZENER DIODE HZ11B2L(11V)
★D412	407 158 1307	ZENER DIODE HZ11B2L(11V)
D436	407 007 6606	DIODE ES1
	407 124 5506	DIODE RMPG06G
	407 124 6404	DIODE ERA18-04
D451	407 005 8602	DIODE ERA15-02
	407 011 3004	DIODE S5277B
	407 088 6502	DIODE MPG06D
	408 009 9404	DIODE 1N4002ID
D474	407 007 7603	DIODE EU2
D476	407 007 6606	DIODE ES1
	407 124 5506	DIODE RMPG06G
	407 124 6404	DIODE ERA18-04
D478	407 005 8602	DIODE ERA15-02
	407 011 3004	DIODE S5277B
	407 088 6502	DIODE MPG06D
	408 009 9404	DIODE 1N4002ID
D483	407 011 4407	DIODE TVR1G
D501	407 048 1103	ZENER DIODE EQA02-05D(5V)
	407 048 1202	ZENER DIODE EQA02-05E(5V)
	407 056 7906	ZENER DIODE RD5.1EB1(5.1V)
	407 056 8002	ZENER DIODE RD5.1EB2(5.1V)
D502	407 143 2708	ZENER DIODE HZ33-2L(33V)
D535	407 048 1103	ZENER DIODE EQA02-05D(5V)
	407 048 1202	ZENER DIODE EQA02-05E(5V)
	407 056 7906	ZENER DIODE RD5.1EB1(5.1V)
	407 056 8002	ZENER DIODE RD5.1EB2(5.1V)
D555	407 005 4505	DIODE DS442X
	407 013 1206	DIODE 1S1555
	407 013 4207	DIODE 1S2076
	407 013 7109	DIODE 1S2473
	408 008 2406	DIODE 1N4148
D574	407 005 4505	DIODE DS442X
	407 013 1206	DIODE 1S1555
	407 013 4207	DIODE 1S2076
	407 013 7109	DIODE 1S2473
	408 008 2406	DIODE 1N4148
D601	407 005 4505	DIODE DS442X
	407 013 1206	DIODE 1S1555
	407 013 4207	DIODE 1S2076
	407 013 7109	DIODE 1S2473
	408 008 2406	DIODE 1N4148
D602	407 005 4505	DIODE DS442X
	407 013 1206	DIODE 1S1555
	407 013 4207	DIODE 1S2076
	407 013 7109	DIODE 1S2473
	408 008 2406	DIODE 1N4148
D1501	407 048 1103	ZENER DIODE EQA02-05D(5V)
	407 048 1202	ZENER DIODE EQA02-05E(5V)
	407 056 7906	ZENER DIODE RD5.1EB1(5.1V)
	407 056 8002	ZENER DIODE RD5.1EB2(5.1V)

INTEGRATED CIRCUITS

★IC001	409 047 8602	IC STR30135
IC101	409 274 3302	IC LA7673
★IC451	409 173 2703	IC LA7837
IC501	410 165 3202	IC M37211M2-520SP
IC511	409 289 3403	IC X24C00P
IC521	409 301 2803	IC MN1381-Q
IC1501	409 306 9708	IC MC144143P1
IC1511	409 052 4408	IC TC74HC157P
	409 301 9604	IC MC74HC157AN

COILS

★LF001	610 031 5938	LINE FILTER
	610 031 6034	LINE FILTER
	610 031 6041	LINE FILTER
	610 031 6065	LINE FILTER
	610 031 6072	LINE FILTER
L100	610 032 9492	FILTER COIL
L104	610 031 3958	PEAKING COIL
L301	610 031 3873	PEAKING COIL 10UH
L305	610 237 9952	LC BLOCK
L398	610 031 4214	PEAKING COIL
L401	610 032 5845	FILTER COIL
	610 032 5852	FILTER COIL
	610 032 5869	FILTER COIL
L402	610 031 4276	PEAKING COIL 68UH
L403	610 031 9998	PIPE CORE
L511	610 031 4214	PEAKING COIL
L531	610 031 4214	PEAKING COIL
L532	610 031 4139	PEAKING COIL 33UH
★L901	610 030 4765	DEGAUSSING COIL
	610 030 5137	DEGAUSSING COIL
	645 002 5594	DEGAUSSING COIL
	645 002 5600	DEGAUSSING COIL
★L902	610 003 5270	DEFLECTION YOKE
	610 003 5287	DEFLECTION YOKE
L1508	610 031 4214	PEAKING COIL

TRANSISTORS

Q021	405 011 7305	TR 2SC1740-Q
	405 011 7404	TR 2SC1740-R
	405 011 7503	TR 2SC1740-S
	405 012 2002	TR 2SC1815-GR
	405 012 2101	TR 2SC1815-O
	405 012 2309	TR 2SC1815-Y
	405 019 1909	TR 2SC536-E-NP
	405 019 2708	TR 2SC536-F-NP
	405 019 3804	TR 2SC536-G-NP
	405 020 7501	TR 2SC945A-PA
	405 020 7709	TR 2SC945A-QA
	405 020 7907	TR 2SC945A-RA
Q022	405 011 7305	TR 2SC1740-Q
	405 011 7404	TR 2SC1740-R
	405 011 7503	TR 2SC1740-S
	405 012 2002	TR 2SC1815-GR
	405 012 2101	TR 2SC1815-O
	405 012 2309	TR 2SC1815-Y
	405 019 1909	TR 2SC536-E-NP
	405 019 2708	TR 2SC536-F-NP
	405 019 3804	TR 2SC536-G-NP
	405 020 7501	TR 2SC945A-PA
	405 020 7709	TR 2SC945A-QA
	405 020 7907	TR 2SC945A-RA
Q023	405 001 7407	TR 2SA1015-O(SAN)
	405 001 7605	TR 2SA1015-Y(SAN)
	405 004 3109	TR 2SA564A-Q(CU)
	405 004 3208	TR 2SA564A-R(CU)
	405 004 4205	TR 2SA608-E-CTV-NP
	405 004 4809	TR 2SA608-F-CTV-NP
	405 006 1103	TR 2SA933-Q
	405 006 1202	TR 2SA933-R
	406 000 6804	TR 2SA1015-GR(SAN)
Q031	405 011 7305	TR 2SC1740-Q

Schematic Location	Part No.	Description
	405 011 7404	TR 2SC1740-R
	405 011 7503	TR 2SC1740-S
	405 012 2002	TR 2SC1815-GR
	405 012 2101	TR 2SC1815-O
	405 012 2309	TR 2SC1815-Y
	405 019 1909	TR 2SC536-E-NP
	405 019 2708	TR 2SC536-F-NP
	405 019 3804	TR 2SC536-G-NP
	405 020 7501	TR 2SC945A-PA
	405 020 7709	TR 2SC945A-QA
	405 020 7907	TR 2SC945A-RA
Q101	405 001 7407	TR 2SA1015-O(SAN)
	405 001 7605	TR 2SA1015-Y(SAN)
	405 004 3109	TR 2SA564A-Q(CU)
	405 004 3208	TR 2SA564A-R(CU)
	405 004 4205	TR 2SA608-E-CTV-NP
	405 004 4809	TR 2SA608-F-CTV-NP
	405 006 1103	TR 2SA933-Q
	405 006 1202	TR 2SA933-R
	406 000 6804	TR 2SA1015-GR(SAN)
Q301	405 001 7407	TR 2SA1015-O(SAN)
	405 001 7605	TR 2SA1015-Y(SAN)
	405 004 3109	TR 2SA564A-Q(CU)
	405 004 3208	TR 2SA564A-R(CU)
	405 004 4205	TR 2SA608-E-CTV-NP
	405 004 4809	TR 2SA608-F-CTV-NP
	405 006 1103	TR 2SA933-Q
	405 006 1202	TR 2SA933-R
	406 000 6804	TR 2SA1015-GR(SAN)
Q303	405 011 7305	TR 2SC1740-Q
	405 011 7404	TR 2SC1740-R
	405 011 7503	TR 2SC1740-S
	405 012 2002	TR 2SC1815-GR
	405 012 2101	TR 2SC1815-O
	405 012 2309	TR 2SC1815-Y
	405 019 1909	TR 2SC536-E-NP
	405 019 2708	TR 2SC536-F-NP
	405 019 3804	TR 2SC536-G-NP
	405 020 7501	TR 2SC945A-PA
	405 020 7709	TR 2SC945A-QA
	405 020 7907	TR 2SC945A-RA
Q341	405 023 5009	TR 2SD400-E-MP
	405 023 5306	TR 2SD400-F-MP
Q342	405 023 5009	TR 2SD400-E-MP
	405 023 5306	TR 2SD400-F-MP
Q401	405 040 6102	TR 2SC2228M
	406 000 5302	TR 2SC2229-M(SAN-1)
★Q402	405 022 6601	TR 2SD1649-CTV-YB
Q421	405 001 7407	TR 2SA1015-O(SAN)
	405 001 7605	TR 2SA1015-Y(SAN)
	405 004 3109	TR 2SA564A-Q(CU)
	405 004 3208	TR 2SA564A-R(CU)
	405 004 4205	TR 2SA608-E-CTV-NP
	405 004 4809	TR 2SA608-F-CTV-NP
	405 006 1103	TR 2SA933-Q
	405 006 1202	TR 2SA933-R
	406 000 6804	TR 2SA1015-GR(SAN)
Q422	405 001 7407	TR 2SA1015-O(SAN)
	405 001 7605	TR 2SA1015-Y(SAN)
	405 004 3109	TR 2SA564A-Q(CU)
	405 004 3208	TR 2SA564A-R(CU)
	405 004 4205	TR 2SA608-E-CTV-NP
	405 004 4809	TR 2SA608-F-CTV-NP
	405 006 1103	TR 2SA933-Q
	405 006 1202	TR 2SA933-R
	406 000 6804	TR 2SA1015-GR(SAN)
Q535	405 001 7407	TR 2SA1015-O(SAN)
	405 001 7605	TR 2SA1015-Y(SAN)

Schematic Location	Part No.	Description
	405 004 3109	TR 2SA564A-Q(CU)
	405 004 3208	TR 2SA564A-R(CU)
	405 004 4205	TR 2SA608-E-CTV-NP
	405 004 4809	TR 2SA608-F-CTV-NP
	405 006 1103	TR 2SA933-Q
	405 006 1202	TR 2SA933-R
	406 000 6804	TR 2SA1015-GR(SAN)
Q541	405 011 7305	TR 2SC1740-Q
	405 011 7404	TR 2SC1740-R
	405 011 7503	TR 2SC1740-S
	405 012 2002	TR 2SC1815-GR
	405 012 2101	TR 2SC1815-O
	405 012 2309	TR 2SC1815-Y
	405 019 1909	TR 2SC536-E-NP
	405 019 2708	TR 2SC536-F-NP
	405 019 3804	TR 2SC536-G-NP
	405 020 7501	TR 2SC945A-PA
	405 020 7709	TR 2SC945A-QA
	405 020 7907	TR 2SC945A-RA
Q542	405 011 7305	TR 2SC1740-Q
	405 011 7404	TR 2SC1740-R
	405 011 7503	TR 2SC1740-S
	405 012 2002	TR 2SC1815-GR
	405 012 2101	TR 2SC1815-O
	405 012 2309	TR 2SC1815-Y
	405 019 1909	TR 2SC536-E-NP
	405 019 2708	TR 2SC536-F-NP
	405 019 3804	TR 2SC536-G-NP
	405 020 7501	TR 2SC945A-PA
	405 020 7709	TR 2SC945A-QA
	405 020 7907	TR 2SC945A-RA
Q601	405 013 4500	TR 2SC2230A-GR
	405 013 4609	TR 2SC2230A-Y
Q602	405 013 4500	TR 2SC2230A-GR
	405 013 4609	TR 2SC2230A-Y
Q701	405 010 6507	TR 2SC1473NC-P
	405 010 6606	TR 2SC1473NC-Q
	405 010 6705	TR 2SC1473NC-R
Q703	405 010 6507	TR 2SC1473NC-P
	405 010 6606	TR 2SC1473NC-Q
	405 010 6705	TR 2SC1473NC-R
Q705	405 010 6507	TR 2SC1473NC-P
	405 010 6606	TR 2SC1473NC-Q
	405 010 6705	TR 2SC1473NC-R
Q823	405 001 7407	TR 2SA1015-O(SAN)
	405 001 7605	TR 2SA1015-Y(SAN)
	405 004 3109	TR 2SA564A-Q(CU)
	405 004 3208	TR 2SA564A-R(CU)
	405 004 4205	TR 2SA608-E-CTV-NP
	405 004 4809	TR 2SA608-F-CTV-NP
	405 006 1103	TR 2SA933-Q
	405 006 1202	TR 2SA933-R
	406 000 6804	TR 2SA1015-GR(SAN)

RESISTORS

NOTES:
Read description in the Resistor as follows:

(Example)

CARBON 4.7K J A 1/4W

- 1/4W — Rated Wattage
- A — Performance Symbols:
  A...General B...Non-flammable
  Z...Low noise
  Other...Temperature coefficient
- J — Tolerance Symbols:
  A... ± 0.05% B... ± 0.1% C... ± 0.25%
  D... ± 0.5% F... ± 1% G... ± 2%
  J... ± 5% K... ± 10% M... ± 20%
  P...+5 − 15%
- 4.7K — Rated Value, ohms:
  K...1,000 M...1,000,000
- CARBON — Material:
  CARBON ····· Carbon
  MT-FILM ····· Metal Film
  OXIDE-MT ····· Oxide Metal Film
  SOLID ····· Composition
  MT-GLAZE ····· Metal Glaze
  WIRE WOUND ····· Wire Wound
  CERAMIC RES ···· Ceramic
  FUSIBLE RES ····· Fusible

Schematic Location	Part No.	Description		
★R001	402 057 8006	WIRE WOUND	3.3 KA	6W
	402 058 4403	WIRE WOUND	3.3 KA	6W
★R002	401 007 2903	CARBON	1M JA	1/2W
★R004	401 012 7009	CARBON	10K JA	1/4W
★R005	401 016 5803	CARBON	220K JA	1/4W
★R006	401 010 2600	CARBON	47 JB	1/2W
★R007	401 068 6209	OXIDE-MT	5.6 JA	2W
★R008	402 056 5600	WIRE WOUND	180 JA	15W
★R021	402 057 4107	WIRE WOUND	820 KA	6W
	402 057 4206	WIRE WOUND	820 KA	6W
★R022	401 067 0000	OXIDE-MT	270 JA	2W
★R024	401 061 2505	OXIDE-MT	330 JA	1W
R025	401 027 2600	CARBON	5.6K JA	1/6W
R026	401 024 7004	CARBON	1K JA	1/6W
R027	401 026 9907	CARBON	4.7K JA	1/6W
R028	401 027 2600	CARBON	5.6K JA	1/6W
R031	401 016 5803	CARBON	220K JA	1/4W
R032	401 024 7400	CARBON	10K JA	1/6W
R101	401 024 7004	CARBON	1K JA	1/6W
R102	401 024 7707	CARBON	100K JA	1/6W
R103	401 026 1604	CARBON	270K JA	1/6W
R104	401 026 1604	CARBON	270K JA	1/6W
R105	401 027 0309	CARBON	47K JA	1/6W
R107	401 027 2600	CARBON	5.6K JA	1/6W
R108	401 024 7004	CARBON	1K JA	1/6W
R109	401 026 0607	CARBON	270 JA	1/6W
R110	401 027 8305	CARBON	820 JA	1/6W
R112	401 025 7409	CARBON	220 JA	1/6W
R113	401 025 1308	CARBON	150 JA	1/6W
R114	401 025 7409	CARBON	220 JA	1/6W
R115	401 026 1604	CARBON	270K JA	1/6W
R116	401 026 4902	CARBON	330K JA	1/6W
R118	401 026 4308	CARBON	3.3K JA	1/6W
R133	401 024 7400	CARBON	10K JA	1/6W
R143	401 025 7409	CARBON	220 JA	1/6W

Schematic Location	Part No.	Description		
R151	401 027 8602	CARBON	8.2K JA	1/6W
R301	401 024 7004	CARBON	1K JA	1/6W
R306	401 025 0004	CARBON	120K JA	1/6W
R307	401 027 8305	CARBON	820 JA	1/6W
R308	401 027 8305	CARBON	820 JA	1/6W
R311	401 026 9600	CARBON	470 JA	1/6W
R312	401 027 3003	CARBON	56K JA	1/6W
R313	401 024 8001	CARBON	1M JA	1/6W
R314	401 024 8001	CARBON	1M JA	1/6W
R316	401 024 7400	CARBON	10K JA	1/6W
R317	401 027 8602	CARBON	8.2K JA	1/6W
R320	401 024 6700	CARBON	100 JA	1/6W
R324	401 024 7004	CARBON	1K JA	1/6W
R325	401 024 7400	CARBON	10K JA	1/6W
R326	401 026 4605	CARBON	33K JA	1/6W
R328	401 026 1307	CARBON	27K JA	1/6W
R330	401 026 9600	CARBON	470 JA	1/6W
R342	401 012 4503	CARBON	100 JA	1/4W
★R344	401 058 7209	OXIDE-MT	12 JA	1W
R345	401 025 1308	CARBON	150 JA	1/6W
★R401	401 069 8202	OXIDE-MT	8.2K JA	2W
R402	401 024 9701	CARBON	12K JA	1/6W
R403	401 026 9600	CARBON	470 JA	1/6W
R404	401 027 3201	CARBON	560K JA	1/6W
R405	401 008 1608	CARBON	1.8K JA	1/2W
R406	401 025 7805	CARBON	2.2K JA	1/6W
R407	401 025 1308	CARBON	150 JA	1/6W
R408	401 021 3009	CARBON	5.6K JA	1/4W
★R409	401 064 9907	OXIDE-MT	10K JA	2W
★R413	401 053 2605	MT-FILM	3.3K FA	1/6W
R421	401 026 4605	CARBON	33K JA	1/6W
R422	401 027 3003	CARBON	56K JA	1/6W
R423	401 024 7400	CARBON	10K JA	1/6W
R424	401 024 7400	CARBON	10K JA	1/6W
R426	401 024 7707	CARBON	100K JA	1/6W
R436	401 062 6106	OXIDE-MT	560 JA	1W
R451	401 026 3707	CARBON	33 JA	1/6W
R452	401 026 1307	CARBON	27K JA	1/6W
R453	401 025 4200	CARBON	1.8K JA	1/6W
R454	401 027 5502	CARBON	6.8K JA	1/6W
R456	401 026 7002	CARBON	3.9K JA	1/6W
R457	401 027 5205	CARBON	680 JA	1/6W
R458	401 008 3701	CARBON	2.2 JA	1/2W
R459	401 019 1000	CARBON	390 JA	1/4W
R460	401 025 4200	CARBON	1.8K JA	1/6W
R462	401 027 2600	CARBON	5.6K JA	1/6W
R463	401 026 4308	CARBON	3.3K JA	1/6W
R464	401 027 5908	CARBON	68K JA	1/6W
★R473	401 068 6209	OXIDE-MT	5.6 JA	2W
R474	401 006 7701	CARBON	1 JB	1/2W
R476	401 006 7701	CARBON	1 JB	1/2W
R477	401 024 7004	CARBON	1K JA	1/6W
R478	401 018 5801	CARBON	330K JA	1/4W
R483	401 012 3506	CARBON	10 JB	1/4W
★R485	401 053 2605	MT-FILM	3.3K FA	1/6W
★R486	401 052 6802	MT-FILM	10K FA	1/6W
★R490	401 009 3106	CARBON	3.3 JA	1/2W
★R495	401 008 4401	CARBON	2.7 JA	1/2W
R501	401 013 3307	CARBON	12 JB	1/4W
R502	401 058 8107	OXIDE-MT	120 JA	1W
R505	401 009 7005	CARBON	33K JA	1/2W
R511	401 024 7400	CARBON	10K JA	1/6W
R512	401 024 7400	CARBON	10K JA	1/6W
R532	401 024 7400	CARBON	10K JA	1/6W
R535	401 026 4308	CARBON	3.3K JA	1/6W
R536	401 024 7400	CARBON	10K JA	1/6W
R537	401 025 7805	CARBON	2.2K JA	1/6W
R538	401 025 7805	CARBON	2.2K JA	1/6W

Schematic Location	Part No.	Description
R539	401 025 7805	CARBON 2.2K JA 1/6W
R541	401 026 1307	CARBON 27K JA 1/6W
R542	401 025 7805	CARBON 2.2K JA 1/6W
R543	401 024 7400	CARBON 10K JA 1/6W
R544	401 025 8208	CARBON 22K JA 1/6W
R546	401 024 7004	CARBON 1K JA 1/6W
R547	401 024 7400	CARBON 10K JA 1/6W
R551	401 024 7400	CARBON 10K JA 1/6W
R552	401 027 2600	CARBON 5.6K JA 1/6W
R553	401 026 7408	CARBON 39K JA 1/6W
R555	401 053 4708	MT-FILM 6.8K FA 1/6W
R556	401 025 1605	CARBON 1.5K JA 1/6W
R557	401 052 9308	MT-FILM 15K FA 1/6W
R559	401 027 2600	CARBON 5.6K JA 1/6W
R560	401 026 9907	CARBON 4.7K JA 1/6W
R563	401 027 5502	CARBON 6.8K JA 1/6W
R564	401 027 8602	CARBON 8.2K JA 1/6W
R567	401 027 2600	CARBON 5.6K JA 1/6W
R568	401 027 2600	CARBON 5.6K JA 1/6W
R570	401 027 2600	CARBON 5.6K JA 1/6W
R571	401 027 2600	CARBON 5.6K JA 1/6W
R572	401 027 0309	CARBON 47K JA 1/6W
R574	401 025 8703	CARBON 220K JA 1/6W
R575	401 025 4903	CARBON 180K JA 1/6W
R576	401 024 7004	CARBON 1K JA 1/6W
R577	401 024 7004	CARBON 1K JA 1/6W
R578	401 024 7004	CARBON 1K JA 1/6W
R579	401 024 7004	CARBON 1K JA 1/6W
R592	401 024 7004	CARBON 1K JA 1/6W
R593	401 024 7004	CARBON 1K JA 1/6W
R594	401 024 7004	CARBON 1K JA 1/6W
R595	401 027 2600	CARBON 5.6K JA 1/6W
R596	401 027 8602	CARBON 8.2K JA 1/6W
R597	401 026 4308	CARBON 3.3K JA 1/6W
R602	401 025 3807	CARBON 180 JA 1/6W
R603	401 025 8208	CARBON 22K JA 1/6W
R604	401 012 8105	CARBON 100K JA 1/4W
R606	401 025 4200	CARBON 1.8K JA 1/6W
R607	401 008 8102	CARBON 22K JA 1/2W
★R608	402 003 0504	FUSIBLE RES 1.2K J- 2W
R610	401 011 1107	CARBON 68 JA 1/2W
R703	401 025 1308	CARBON 150 JA 1/6W
R706	401 025 1308	CARBON 150 JA 1/6W
R707	401 024 6700	CARBON 100 JA 1/6W
R710	401 025 1308	CARBON 150 JA 1/6W
★R711	401 059 4900	OXIDE-MT 15K JA 1W
★R712	401 059 4900	OXIDE-MT 15K JA 1W
★R713	401 059 4900	OXIDE-MT 15K JA 1W
R715	401 009 1508	CARBON 2.7K JA 1/2W
R716	401 009 1508	CARBON 2.7K JA 1/2W
R717	401 009 1508	CARBON 2.7K JA 1/2W
R858	401 026 9600	CARBON 470 JA 1/6W
R1001	401 027 2600	CARBON 5.6K JA 1/6W
R1002	401 026 4308	CARBON 3.3K JA 1/6W
R1003	401 025 7805	CARBON 2.2K JA 1/6W
R1004	401 025 4200	CARBON 1.8K JA 1/6W
R1005	401 025 1605	CARBON 1.5K JA 1/6W
R1006	401 025 1605	CARBON 1.5K JA 1/6W
R1007	401 024 9305	CARBON 1.2K JA 1/6W
R1008	401 024 7400	CARBON 10K JA 1/6W
R1501	401 027 3003	CARBON 56K JA 1/6W
R1502	401 026 9907	CARBON 4.7K JA 1/6W
R1503	401 026 9600	CARBON 470 JA 1/6W
R1504	401 027 1603	CARBON 5.1K JA 1/6W
R1507	401 014 2903	CARBON 150 JA 1/4W
R1510	401 024 6700	CARBON 100 JA 1/6W
R1511	401 025 1605	CARBON 1.5K JA 1/6W
R1513	401 024 9305	CARBON 1.2K JA 1/6W

Schematic Location	Part No.	Description
R1514	401 024 9305	CARBON 1.2K JA 1/6W
R1516	401 025 7805	CARBON 2.2K JA 1/6W
R1517	401 026 7002	CARBON 3.9K JA 1/6W
R1518	401 025 7805	CARBON 2.2K JA 1/6W
R1519	401 026 7002	CARBON 3.9K JA 1/6W
R1521	401 025 7805	CARBON 2.2K JA 1/6W
R1522	401 025 7805	CARBON 2.2K JA 1/6W
R1523	401 025 7805	CARBON 2.2K JA 1/6W
R1524	401 025 7805	CARBON 2.2K JA 1/6W

SWITCHES

SW701	610 011 4227	LEVEL SWITCH(SERV/NORM SW)
SW1002	610 011 2698	PUSH SWITCH(CH DN)
SW1003	610 011 2698	PUSH SWITCH(CH UP)
SW1004	610 011 2698	PUSH SWITCH(VOL DN)
SW1005	610 011 2698	PUSH SWITCH(VOL UP)
SW1006	610 011 2698	PUSH SWITCH(POWER)
SW1007	610 011 4432	PUSH SWITCH(MENU +)
SW1008	610 011 4432	PUSH SWITCH(MENU -)
SW1009	610 011 4432	PUSH SWITCH(MENU)

TRANSFORMERS

T101	645 000 5206	VIF DETECT. TRANS
T102	610 037 6564	AFT CENTERING TRANS
T103	610 205 6822	PICTURE MATCHING TRANS
T151	610 037 7615	SIF DETECT. TRANS
T401	610 000 7901	HORIZ. DRIVE TRANS
	610 000 7918	HORIZ. DRIVE TRANS
★T402	645 000 3028	HORIZ. OUTPUT TRANS
T601	610 055 6751	SOUND OUTPUT TRANS
	610 055 6904	SOUND OUTPUT TRANS
	610 216 2899	SOUND OUTPUT TRANS
	610 238 5731	SOUND OUTPUT TRANS

VARIABLE RESISTORS

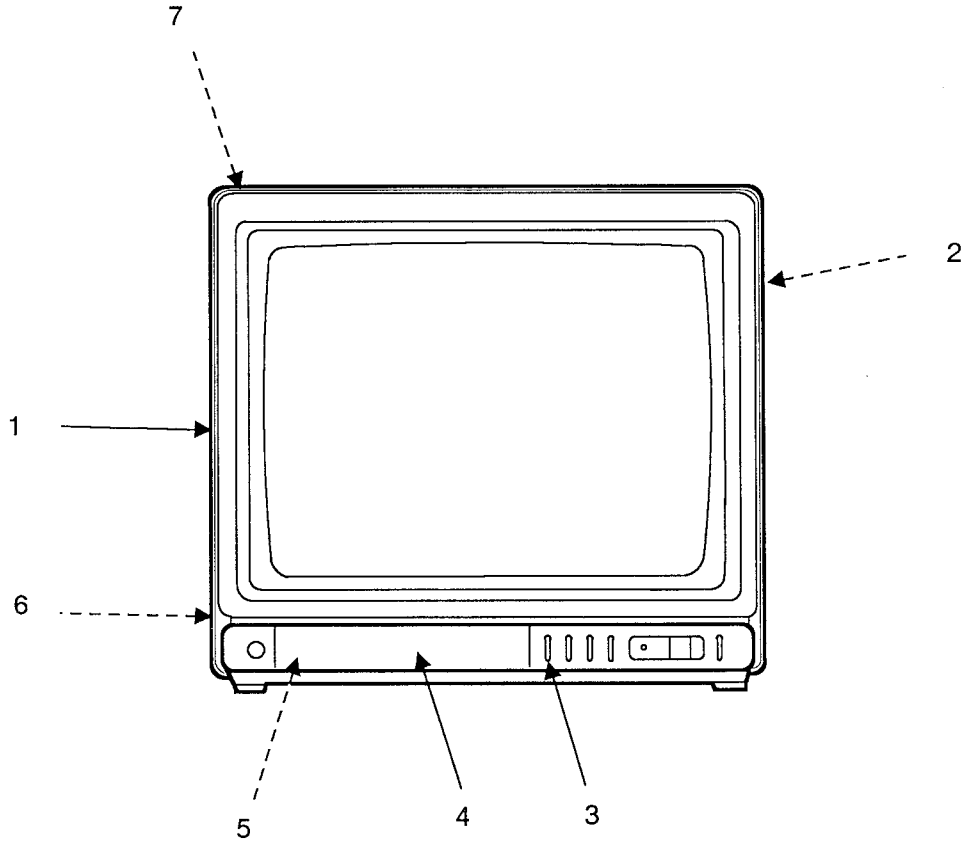
VR101	610 019 2584	VR B-10K(RF-AGC)
	610 019 3901	VR B-10K(RF-AGC)
VR301	610 019 2591	VR B-20K(BRIGHT LEVEL)
	610 019 3918	VR B-20K(BRIGHT LEVEL)
VR451	610 019 2607	VR B-50K(VERT. SIZE)
	610 019 3932	VR B-50K(VERT. SIZE)
VR701	610 019 3673	VR B-10K(RED BIAS)
	610 210 5858	VR B-10K(RED BIAS)
VR702	610 019 3673	VR B-10K(GREEN BIAS)
	610 210 5858	VR B-10K(GREEN BIAS)
VR703	610 019 3673	VR B-10K(BLUE BIAS)
	610 210 5858	VR B-10K(BLUE BIAS)
VR704	610 019 3628	VR B-200(RED DRIVE)
VR705	610 019 3628	VR B-200(BLUE DRIVE)

FILTERS/CRYSTALS

X101	421 001 9104	SAW FILTER
X102	610 015 3059	CERAMIC TRAP
	610 015 3066	CERAMIC TRAP
X153	610 015 2946	CERAMIC FILTER
X301	610 012 0655	CRYSTAL OSCILLATOR
	610 211 6441	CRYSTAL OSCILLATOR
X401	610 012 2970	CERAMIC OSCILLATOR
X531	610 012 2857	CERAMIC OSCILLATOR

Schematic Location	Part No.	Description
		MISCELLANEOUS
A001	610 247 1397	MAIN BOARD
★A101	645 000 0850	UHF/VHF TUNER
A101A	645 002 7864	ANTENNA SHIELD BLOCK
A701	610 247 1403	PIX TUBE SOCKET BOARD
A1002	610 224 5806	RC PRE-AMP UNIT
A9901	610 244 3868	RC TRANSMITTER BOARD
★F001	423 007 1601	FUSE 125V 4A
	423 007 1809	FUSE 125V 4A
	423 018 8101	FUSE 125V 4A
F001A	610 012 4356	FUSE CLIP
	610 212 8543	FUSE CLIP
F001B	610 012 4356	FUSE CLIP
	610 212 8543	FUSE CLIP
★K601	610 010 8844	EARPHONE JACK
★K701	610 010 4310	PIX TUBE SOCKET
★PS001	408 000 3203	TH PTH631D01BF7R0M140
	408 003 6409	THERMISTOR 901P52E070MP16
★Q901	413 006 4703	PIX TUBE A34JRY24X
	414 007 4808	PIX TUBE A34KPU02XX
Q901A1	610 117 0154	DY SPACER
	610 117 7924	DY SPACER
Q901A2	610 117 0154	DY SPACER
	610 117 7924	DY SPACER
Q901A3	610 117 0154	DY SPACER
	610 117 7924	DY SPACER
Q901C	610 003 1562	CG PURITY MAGNET
	610 004 3008	CG PURITY MAGNET
	610 217 7787	CG PURITY MAGNET
★RL001	610 009 5540	RELAY(POWER ON/OFF)
	610 009 5649	RELAY(POWER ON/OFF)
	610 215 6355	RELAY(POWER ON/OFF)
	610 215 6362	RELAY(POWER ON/OFF)
	645 000 4155	RELAY(POWER ON/OFF)
SP901	610 055 5099	SPEAKER
	610 055 6614	SPEAKER
★W901	610 217 9996	AC CORD
	610 230 1229	AC CORD
★W902	610 210 5537	GROUNDING CONNECTOR
	610 210 5544	GROUNDING CONNECTOR

CABINET PARTS LIST



CABINET PARTS LIST

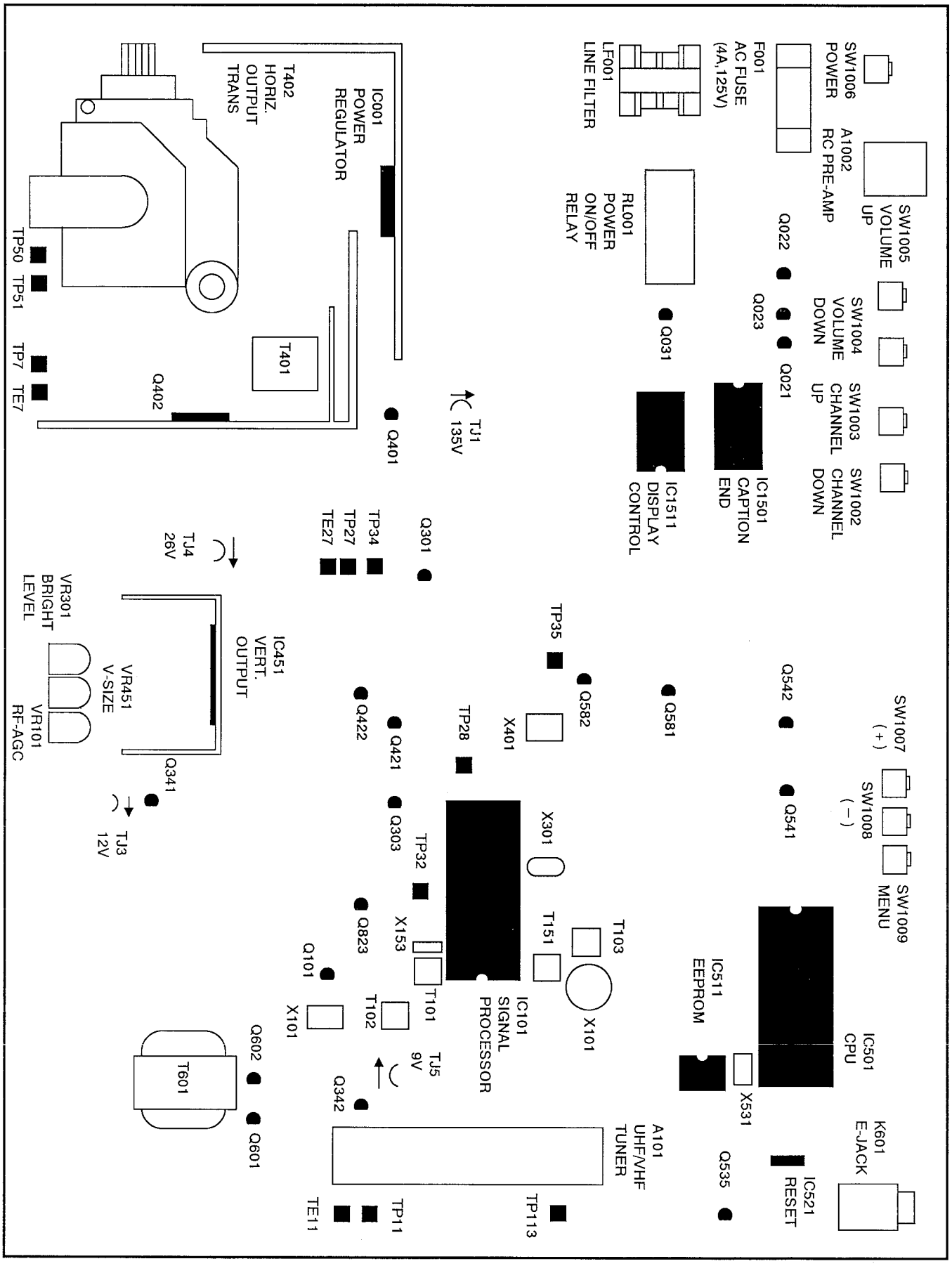
KEY NO.	PARTS NO.	DESCRIPTION
1	610 248 7459	CABINET FRONT ASSY
2	610 206 3271	CABINET BACK
	411 078 1101	SCREW 4X14(5 USED)
OR	412 036 1805	SCREW 4X14(5 USED)
3	610 206 8566	BUTTON ASSY
	412 022 4407	SCREW 3X12(3 USED)
4	610 246 8083	DOOR
5	610 247 3483	CONTROL DEC PLATE
6	610 212 1377	AV DEC PLATE
7	610 102 7151	DEGAUSSING COIL HOLDER(2 USED)

ACCESSORY PARTS LIST

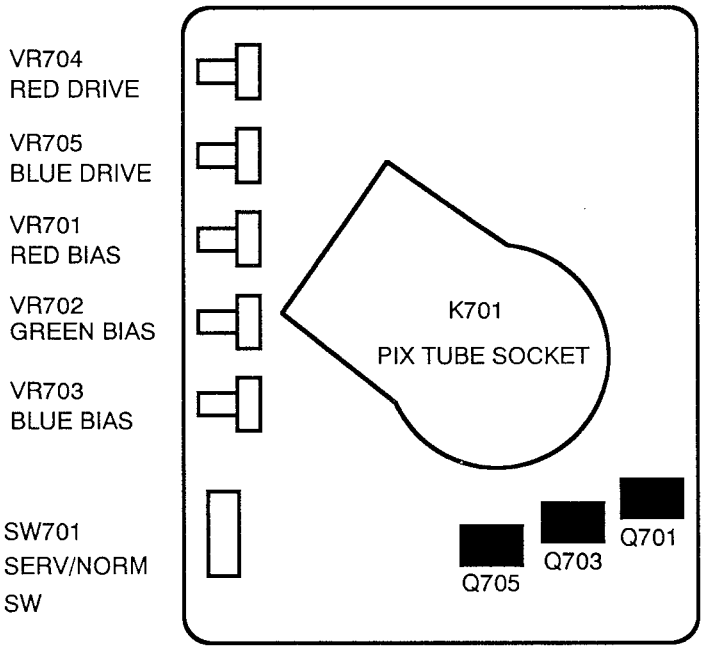
KEY NO.	PARTS NO.	DESCRIPTION
	610 216 4886	ROD ANTENNA ASSY
OR	610 216 4916	ROD ANTENNA ASSY
	610 221 7605	ANTENNA ADAPTER
OR	610 221 7612	ANTENNA ADAPTER
	610 247 8518	OWNER'S MANUAL
	645 000 1291	RC TRANSMITTER ASSY
	610 230 0307	RC BATTERY COVER

COMPONENT AND TESTPOINT LOCATIONS

MAIN BOARD



PIX TUBE SOCKET BOARD



SCHEMATIC DIAGRAMS

NOTES ON SCHEMATIC DIAGRAMS

1. All resistance value in ohms K=1,000 M=1,000,000.
2. Unless otherwise noted in schematic all capacitor values less than 1 are expressed in μ F(Micro Farad), and the values more than 1 are in pF.
3. Unless otherwise noted in schematic voltage reading taken with "VTVM" from point indicated to chassis ground. Voltage reading taken using a color bar signal VHF channel 5, all controls at normal. Line voltage 120 volts. Some voltages may vary with signal strength.
4. Waveforms were taken with color bar signal and controls adjusted for normal picture. Waveforms marked with * may vary with signal strength.
5. The Symbol (FW) indicates fusible resistors. They protect the circuit from possible damage by short circuits.

SERVICE NOTES;

1. When replacing parts on circuit boards, clamp the lead wires to terminals before soldering.
2. When replacing high voltage resistors on circuit board, keep the resistor body 10 mm (3/8") from circuit board.
3. Keep wires away from high voltage and high temperature components.

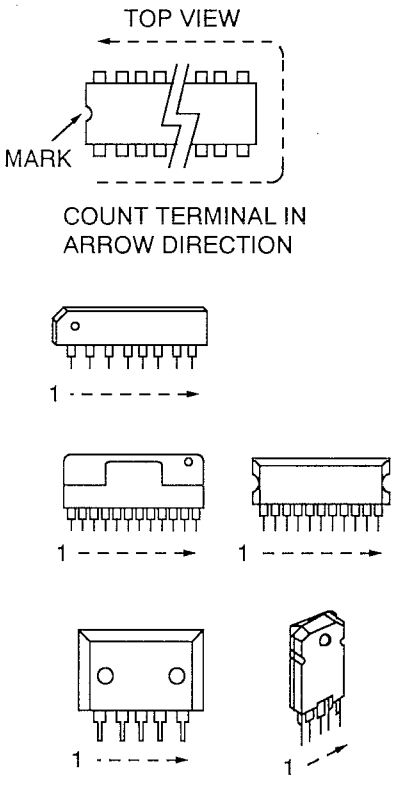
PRODUCT SAFETY NOTICE

THE COMPONENTS DESIGNATED BY A STAR(★) IN THIS SCHEMATIC DIAGRAM DESIGNATE COMPONENT WHOSE VALUES ARE OF SPECIAL SIGNIFICANCE TO PRODUCT SAFETY. SHOULD ANY COMPONENT DESIGNATED BY A STAR NEED TO BE REPLACED, USE ONLY THE PART DESIGNATED IN THE PARTS LIST. DO NOT DEVIATE FROM THE RESISTANCE, WATTAGE AND VOLTAGE RATINGS SHOWN.

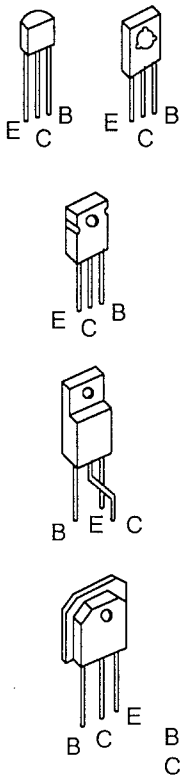
X-RADIATION WARNING NOTE

THIS TV CONTAINS CRITICAL PARTS. TO PROTECT AGAINST X-RADIATION, NOMINAL 2ND ANODE VOLTAGE IS 21.0KV AT ZERO BEAM CURRENT AT 120VOLT AC LINE, AND MUST NOT EXCEED 22.0KV UNDER ANY OPERATING CONDITION.

INTEGRATED CIRCUITS

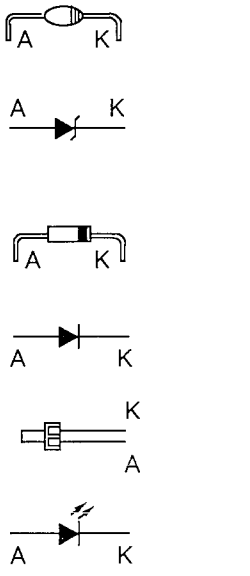


TRANSISTORS



B ... BASE
C ... COLLECTOR
E ... EMITTER

DIODES



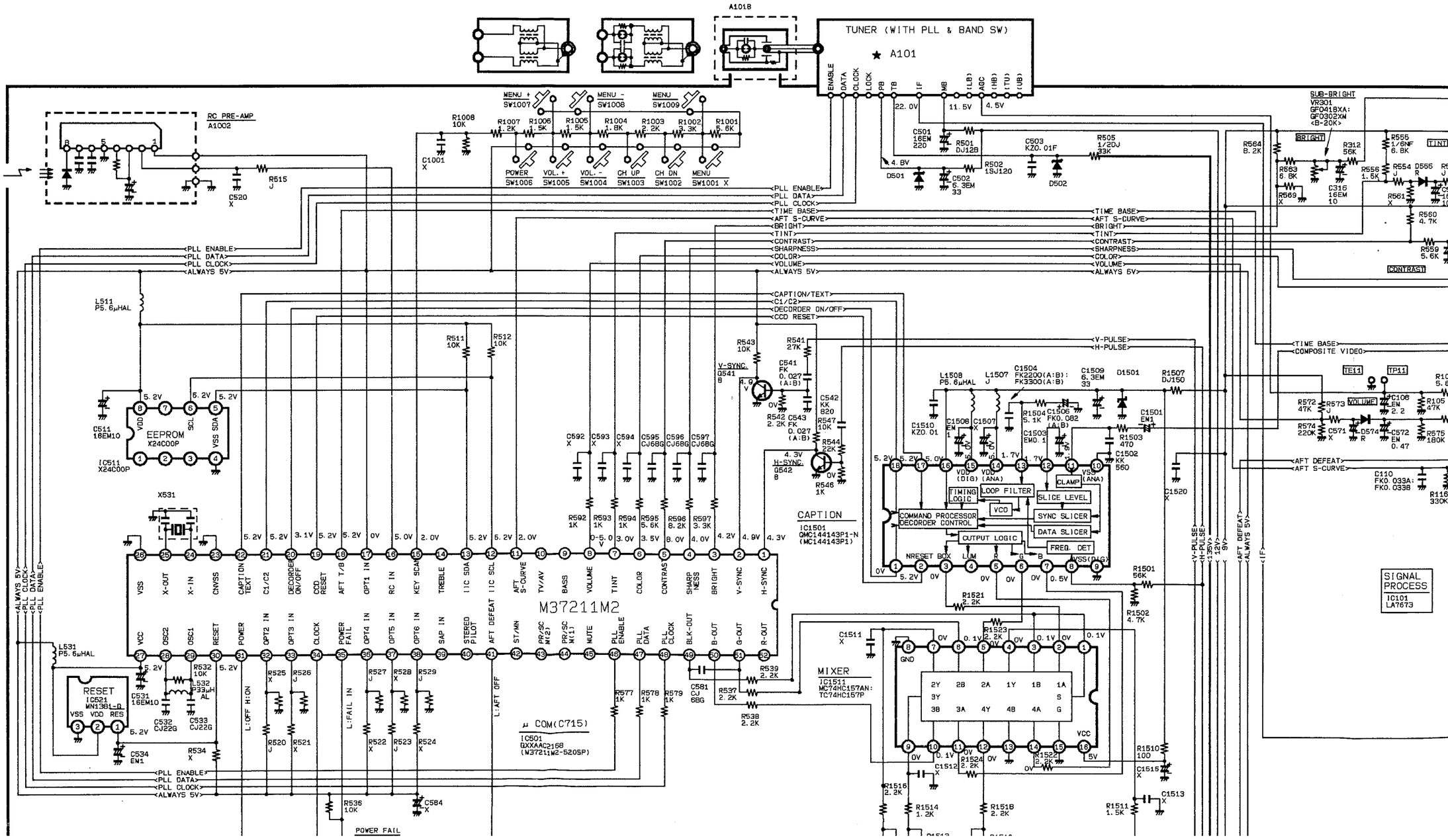
INFRARED
EMITTING DIODE

A ... ANODE
K ... CATHODE

MODEL AVM-1303

Chassis No. A8Y-13030

SM5100029 C-1933 USA 1/1



SUB-BRIGHT
VR301
GF0418XA:
GF0302XM
<B-20K>

BRIGHT

R312
56K

R555
1/6NF
6.8K

TINT

SUB-TINT
VR302
X

R558
X

SHARPNESS

R568
5.6K

R570
5.6K

R571
5.6K

D554
16EM
10

R683
6.8K

R569
X

C316
16EM
10

R556
1.5K

R554
J

D555
R

R565
J

C552
16EM
10

R557
1/6NF
15K

R561
X

R560
4.7K

R552
5.6K

R551
10K
(ADJ)

R567
5.6K

R559
5.6K

C553
16EM
10

C307
EN
1

C551
16EM
10

R301
1K

R553
39K

COLOR

CONTRAST

<BRIGHT>
<TINT>
<CONTRAST>
<SHARPNESS>
<COLOR>

5V HORIZ.

TO IC101 38

3.5MHZ
TRAP
L305
F4XL133--

9.2
V

Q303
B

2.1
V

1.5V

R308
820

R307
820

R311
470

C309
CJ
18G

L302
J

C304
CJ56G

C301
X

C302
KZ0.01F

R302
X

C303
CJ
100G

R324
1K

L301
P10μH
AL

R403
470

C403
EM0.47

R410
X

R404
560K

C402
KK660

<TIME BASE>
<COMPOSITE VIDEO>

TE11

TP11

R107
5.6K

C114
KZ0.01F

R572
47K

R573
J

VOLUME

C106
EM
2.2

R105
47K

R574
220K

C571
X

D574
R

C572
EM
0.47

R575
180K

R576
1K

R103
270K

TP16A

R858
470

4.3V

3.7V

Q823
Y

TP32

TP32
X

R314
1M

C308
EM1

R313
1M

TP2B

TP2B
X

L104
P15μH
AL

R108
1K

R114
220

R112
220

R109
270

3.6V

15T VIDEO
G101 Y

X153

C153
KK100

R143
220

C109
KZ0.01F

T102

TP16

X102

<AFT DEFEAT>
<AFT S-CURVE>

C110
FK0.033A:
FK0.033B

R116
330K

TP113

R115
270K

R104
270K

C107
KK
1000

R133
10K

R832
J

R110
820

C103
X

C108
CJ
56R

C116
16EM
10

C313
EM
0.47

C312
EM1

R318
X

4.3V

C319
X

R106
J

T101

C113
EM
0.47

SIGNAL
PROCESS
IC101
LA7673

APC
DET

VCO

VIDEO
DET

LOCK
DET

VIDEO
AMP

AFT

FM
DET

LIM
AMP

ATT

AF
AMP

IF
AGC

VIF
AMP

RF
AGC

VCC FOR
IF

ACC
KILLER

APC

TINT

VCO

VCC FOR
VIC

1ST
BPA

2ND
BPA

BLACK
EXPAND

SOFT

SHARP

CLAMP
BRI'T

CONT-
RAST

D.L.

VER C/D

VER
SYNC
SEP

HOR
COIN

HOR
C/D

AFC-2

AFC-1

PHASE
SHIFTER

FBT DET
BGT OUT

HOR
DRIVE

HOR
OSC

HOLD DOWN

OSD SW

-Y OUT

FOR
VIDEO
CHROMA

FOR
HDR

VCC
FOR
HDR

D421
EM
0.47
6.6V

R426
100K

C401
16EM
22

R405
1/2DJ
1.8K

R401
2SJ
8.2K

C406
FK0.033A:
FK0.033B

C404
EM2.2

R406
2.2K

C474
160ET
47XD

R483
DJ
10B

D483
TVR1G

HEATER

GND

C483
EM4.7

R485
1/6NF
3.3K

R486
1/6NF
10K

C476
35EM
100

D476

R476
1/2DJ
1B

C470
X

D452
X

TJ4

26V
100-200MA

TP34
X

TP34

TJ5

9V REG.

D342
2S2400
(E-MP:F-MP)

R344
15J
12

TJ3

12V
300-450MV

R341
J
100

C478
X

D474
EU2

R474
1/2DJ
1B

9V
150-250MA

D346
X

R345
150
10V

D345
R

C484
16EM
470

12.5V

C341
16EM
470

D341
EQA02
-10A

C342
10EM
100

RIPPLE
FILTER

Q341
2S2400
(E-MP:F-MP)

R495
1/2DJ
2.7

R490
1/2DJ
3.3

25V HORIZ.

KU

HORIZ. OUTPUT
TRANS
★ T402

HIGH
VOLTAGE

FOCUS

SCREEN

ABL

V-OUT

LOW +B

R495
1/2DJ
2.7

R490
1/2DJ
3.3

25V HORIZ.

KU

HORIZ. OUTPUT
TRANS
★ T402

HIGH
VOLTAGE

FOCUS

SCREEN

ABL

V-OUT

LOW +B

6V VERT.

V-OUT
★ IC451
LA7837

0.8V HORIZ.

TO Q401 BASE

4V HORIZ.

TO Q402 BASE

60V VERT.

DEFLECTION YOKE
★ L902

RAMP GEN

V-OUT

SIZE
CONT

PUMP
UP

VCC

VCC

R451
33

R455
X

D451
25EM
220

R464
68K

R452
27K

C452
EM1CF

C461
FK0.01A
FK0.01B

R456
3.9K

V-SIZE
VR451
GF0420XA:
GF0303XM
<B-50K>

C453
EM4.7

R453
1.8K

R457
680

R454
6.8K

C466
X

R458
1/2DJ
2.2

C457
35EM
47

C464
KK270

D451

C456
35EM
100

D453
X

L463
U

C459
FK0.082A:
FK0.082B:
630J0.082V

R469
X

C469
X

R459
DJ
390

R461

R460

C436
200NJ
0.22

C437
X

V-CENTER ADJ.

CENT R460 1.8K
UP R460 1/2DJ1K
DOWN R461 DJ2.2K

D436
ERA18-04:
ES1:
RMPG06G

R436
15J560

R409
2SJ10K

L403

T401

L401

C432
1500MF
4300XF

C431
X

C433
3000KK680AHH:
3000KK680CGB:
3000KK680CGD:
3000KK680CTD

C428
160EM
4.7BE

R407
150

C420
KK470

H-DRIVE
Q401
2SC2228M:
2SC2229M

L402
P68
μHAL

C407
500KK
1000A

C409
500KK
150A

H-OUT
Q402
2SD1649YB

R408
DJ5.6K

C473
X

R475
6WJ
X

R473
2SJ
5.6

C434
500KK
4700A

KX

<IF>

<TIME BASE>

TIME BASE
Q421/Q422
Y

R421
33K

R423
10K

5.3V

5.3V

6.6V

4.7V

Q421

Q422

5.2V

R424
10K

R422
56K

R463
3.3K

R462
5.6K

R402
12K

<V-STOP>
<V-PULSE>
<9V>
<135V>
<26V>

<H-DRIVE>

R102
100K

C102
KZ0.01F

RF-AGC
VR101
GF0417XA:
GF0301XM
<B-10K>

TP132

L100
L787

C104
HJ0.22:
630J0.22V

TP20

TP12

6.8V

4.1V

C152
FK6200A:
FK6200B

T151

5.6V

R151
6.2K

C151
KZ
0.01F

T103

4.5V

4.5V

5.4V

R118
3.3K

R101
1K

TP17

C101
KZ
0.01F

9.1V

L399
J

X101

C399
10EM
100

C322
EM2.2

5.8V

C321
FK0.015A:
FK0.015B

R316
10K

R317
8.2K

5.6V

9.0V

L398
F5.6
μHAL

C398
10EM
100

0V

0V

5.2V

C363
X

5.2V

C362
X

5.3V

C361
X

4.4V

0.1V

0V

0V

5.0V

5.6V
X401

C406
FK0.033A:
FK0.033B

R371
J

R372
J

R373
J

R323
J

R322
J

R321
J

R329
J

R332
J

R326
33K

R325
10K

C324
KK470

D330
X

R330
470

4.4V

4.8V

C335
X

TP27
X

TP27

0V

VIDEO AMP
Q301
Y

R320
100

TE27

TE27
X

D303
R

D306
P

C467
KK
270

TP35

R303
X

R304
X

R305
X

R306
X

R307
X

R308
X

R309
X

R310
X

R311
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R312
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R313
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R314
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R315
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R316
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R317
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R318
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R319
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R320
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R494
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R495
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R496
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R497
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R498
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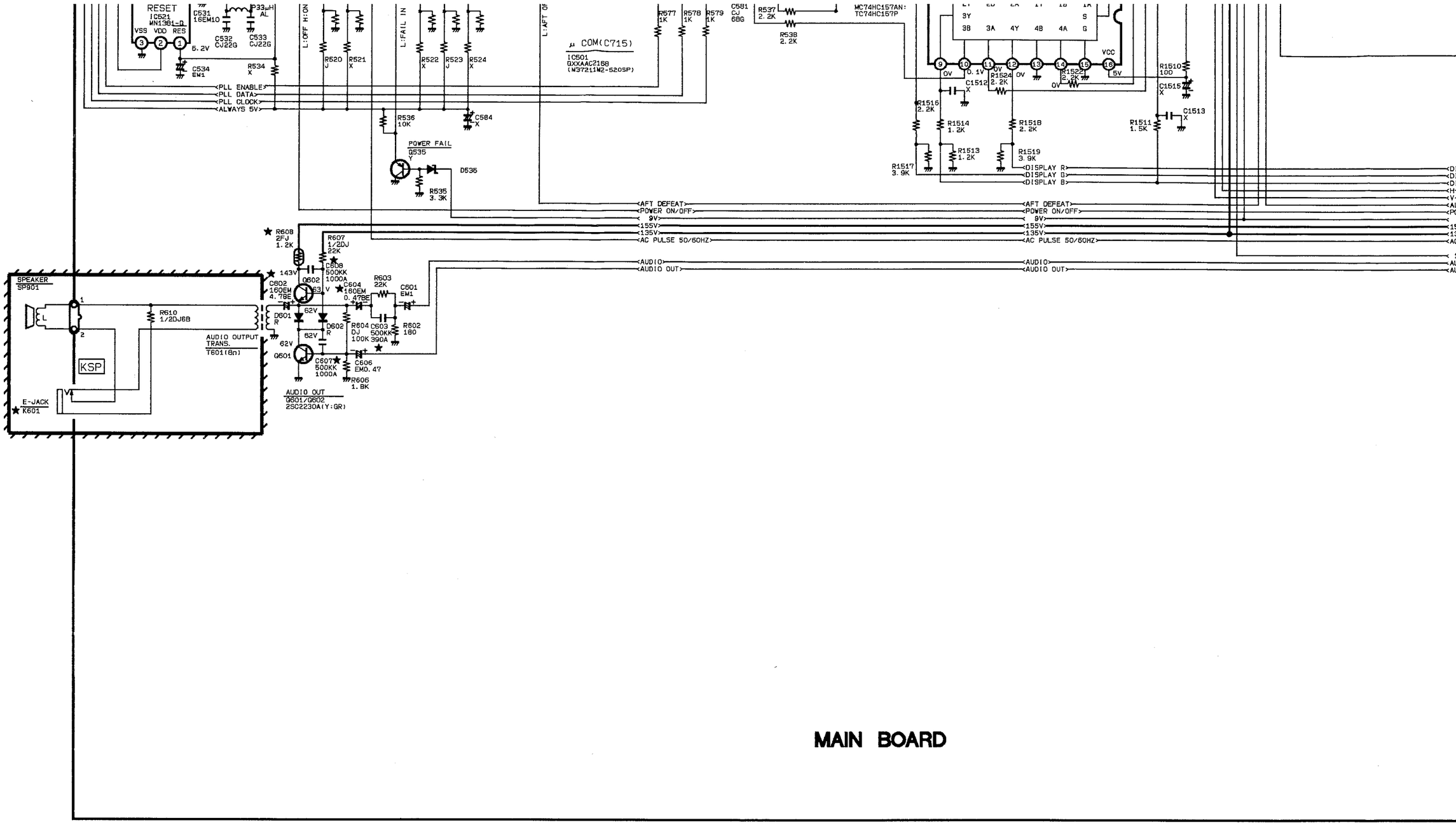
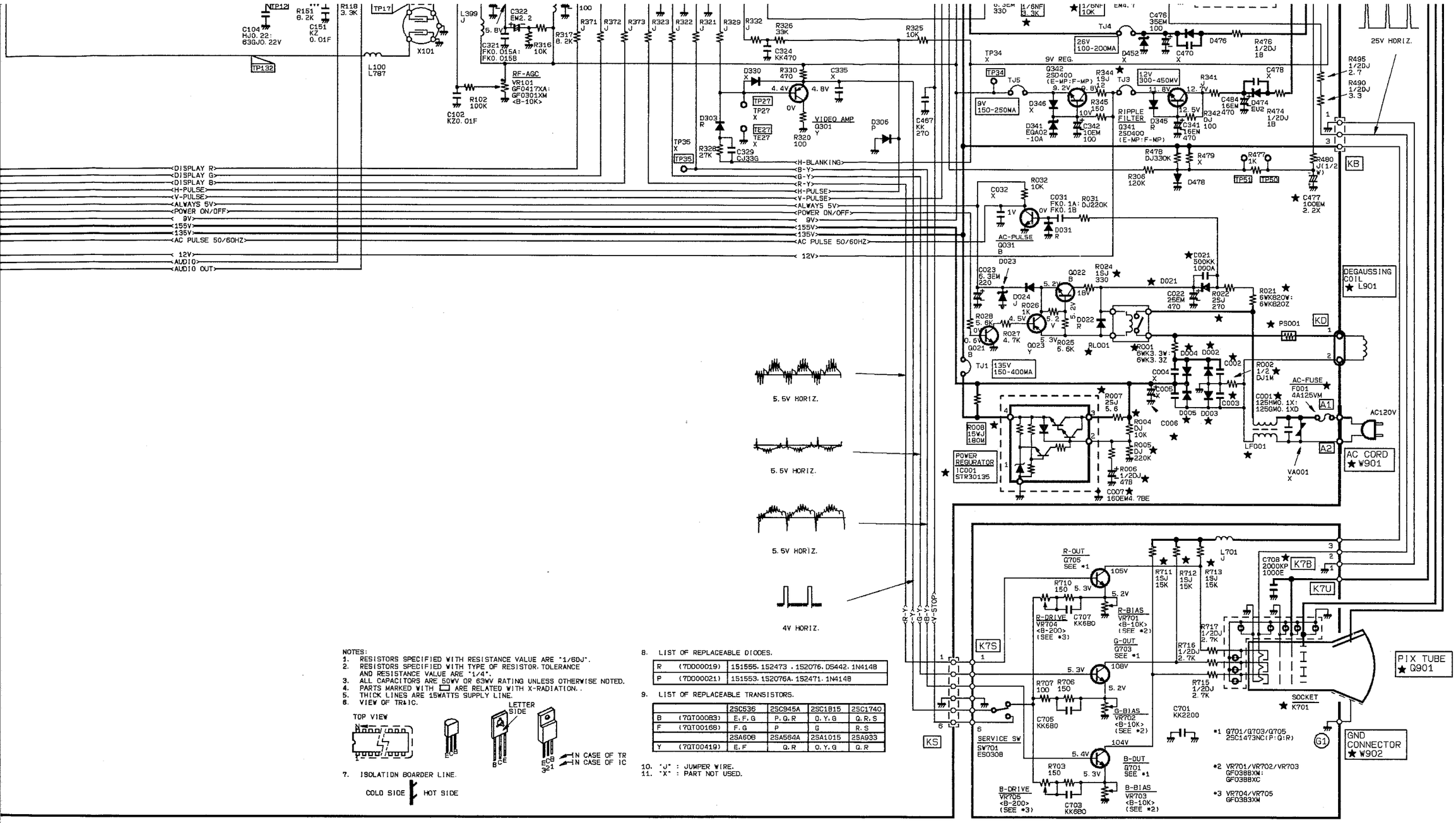
R499
X

R500
X


RESET
IC621
MN1361-D
VSS VDD RES
5.2V
C531
16EM10
33μH
AL
C532
CJ22G
C533
CJ22G
C534
EM1
R534
X
L:OFF H:ON
R520
J
R521
X
L:FAIL IN
R522
X
R523
J
R524
X
L:AFT OF
μ COM(C715)
IC501
GXXAAC2188
(M37211M2-520SP)
R536
10K
C584
X
POWER FAIL
Q535
Y
D536
R535
3.3K
<PLL ENABLE>
<PLL DATA>
<PLL CLOCK>
<ALWAYS 5V>
R677
1K
R578
1K
R579
1K
C581
CJ
6BG
R537
2.2K
R538
2.2K
MC74HC157AN:
TC74HC157P
1A
1B
S
3Y
3B
3A
4Y
4B
4A
G
VCC
9
10
11
12
13
14
15
16
0V
0.1V
0V
0V
5V
C1512
X
R1524
2.2K
R1522
2.2K
R1516
2.2K
R1514
1.2K
R1513
1.2K
R1517
3.9K
R151B
2.2K
R1519
3.9K
R1510
10D
C1515
X
C1513
X
R1511
1.5K
<DISPLAY R>
<DISPLAY G>
<DISPLAY B>
<AFT DEFEAT>
<POWER ON/OFF>
9V
155V
135V
<AC PULSE 50/60HZ>
<AUDIO>
<AUDIO OUT>
R608
2FJ
1.2K
R607
1/2DJ
22K
C608
500KK
1000A
143V
C602
160EM
4.78E
Q602
63V
C604
160EM
0.47BE
R603
22K
C601
EM1
D601
R
62V
D602
R
R604
DJ
100K
C603
500KK
390A
R602
180
62V
62V
Q601
C607
500KK
1000A
C606
EM0.47
R606
1.8K
AUDIO OUT
Q601/Q602
2SC2230A(Y:GR)
SPEAKER
SP901
L
R610
1/2DJ6B
AUDIO OUTPUT
TRANS.
T601(8Ω)
KSP
E-JACK
K601

MAIN BOARD



NOTES:
1. RESISTORS SPECIFIED WITH RESISTANCE VALUE ARE "1/6DJ".
2. RESISTORS SPECIFIED WITH TYPE OF RESISTOR, TOLERANCE AND RESISTANCE VALUE ARE "1/4".
3. ALL CAPACITORS ARE 50WV OR 63WV RATING UNLESS OTHERWISE NOTED.
4. PARTS MARKED WITH ☐ ARE RELATED WITH X-RADIATION.
5. THICK LINES ARE 15WATTS SUPPLY LINE.
6. VIEW OF TRAIC.

7. ISOLATION BOARDER LINE.

COLD SIDE | HOT SIDE

8. LIST OF REPLACEABLE DIODES.

R	(7DD00019)	1S1555. 1S2473 . 1S2076. DS442. 1N414B
P	(7DD00021)	1S1553. 1S2076A. 1S2471. 1N414B

9. LIST OF REPLACEABLE TRANSISTORS.

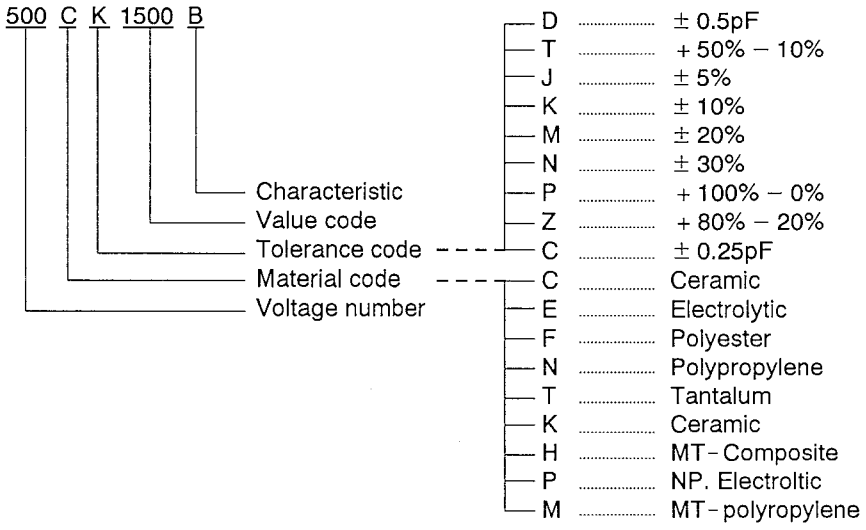
		2SC536	2SC945A	2SC1815	2SC1740
B	(7QT00083)	E, F, G	P, Q, R	O, Y, G	Q, R, S
F	(7QT00168)	F, G	P	G	R, S
		2SA608	2SA564A	2SA1015	2SA933
Y	(7QT00419)	E, F	Q, R	O, Y, G	Q, R

10. "J" : JUMPER WIRE.
11. "X" : PART NOT USED.

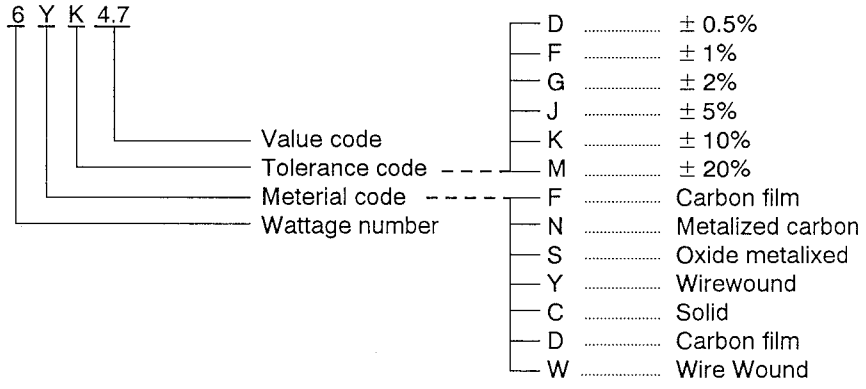
PIX TUBE SOCKET BOARD

CAPACITOR AND RESISTORS CODE CHART

CAPACITOR (Example)



RESISTOR (Example)



For parts or service contact

SFS CORPORATION

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